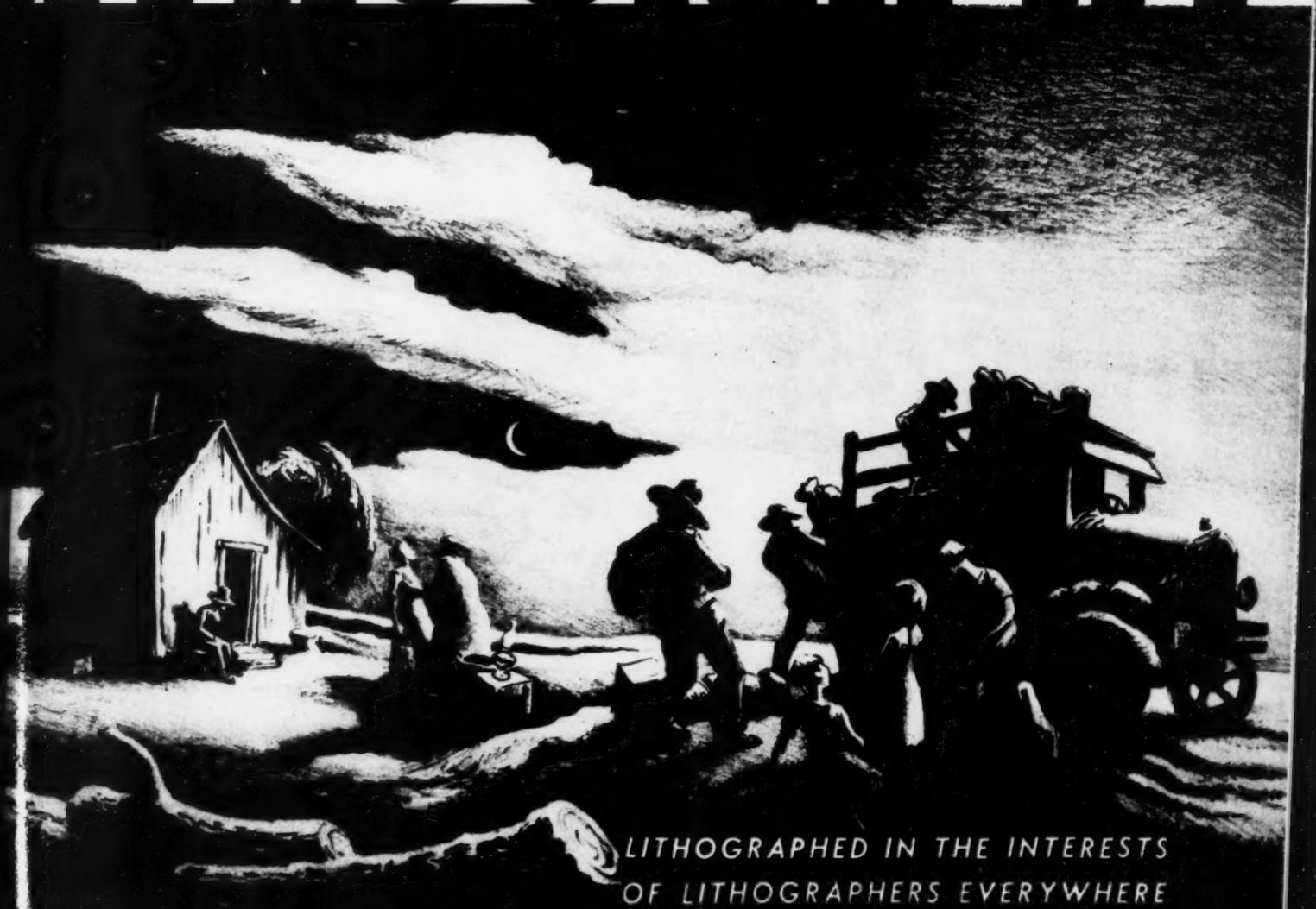
MODERN LITHOGRAPHY

JAN. • 1940 • VOL. 8 • NO.



LITHOGRAPHED IN THE INTERESTS
OF LITHOGRAPHERS EVERYWHERE

Permanent Cerulean Blue 433P

Senelith Inks

were the first lithographic inks

made from dyestuffs

treated with sodium tungstate

for better sunfastness

and are still leading

with their outstanding resistance properties

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 Greene Street **New York, N. Y.**

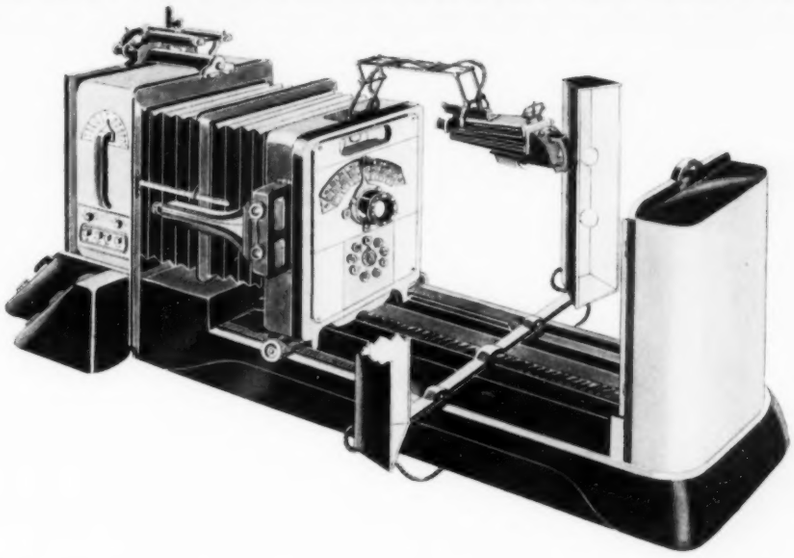
WORLD'S PREMIER ANNOUNCEMENT OF THE

RADIOGRAF

BRINGS COLOR CONTROL RIGHT INTO THE HANDS OF THE OPERATOR

Remote Control

Automatic Negative Reversals



This is the only color engraving camera of its kind and has a 25-claim patent application. It is designed and produced exclusively by the Le Roys, recognized color research chemists.

THE WORLD'S LATEST REMOTE CONTROLLED
COLOR ENGRAVING CAMERA

THESE SPECIFICATIONS WILL INTEREST YOU!

No. 1. Will make negative either in reverse or straight, but requires no prism or moving of the copy board, thus eliminating stripping of any kind or moving any part of camera.

No. 2. Full tilt copy board is synchronized with focal plane of negatives with its own controlled lighting system.

No. 3. Push button concealed filter system. Four combinations of filters are built into the camera and are operated by a colored push button radio dial.

No. 4. Color temperature control.

No. 5. A built-in electric eye scans the entire color picture in the copy board and conveys the readings back to the instrumental board where it is recorded by an electro magnetic meter and the electric controlled needle swings over to the correct exposure. The readings are conveyed by remote control to rear instrumental panel.

No. 6. The copy board is ball bearing, full tilt, and all metal with micro calibrated reductions or enlargements.

No. 7. Split view range finder (coinciding type). This is a quick visibility range finder the same as used on miniature cameras today, but of course much larger. Precision focussing . . . No eye strain. Synchronized from copy board to focal plane of negatives.

No. 8. Built-in filter selector . . . Full copy board visibility for color analysis and for copying difficult copy.

No. 9. Full rheostatic control over lighting system. Automatic light "cut off" for each exposure . . .

No. 10. Full view electric instrumental panels.

No. 11. Floating screen holder, interchangeable rectangular or circular screens.

No. 12. Dark room loading door. Interchangeable with film or dry plates. Note: extra charge for wet plate door . . . This is NOT a dark room camera.

No. 13. Separate diffused transmission lighting system for Kodachrome Separation, thus eliminating heating of Kodachromes. (Balanced for 5000 Degree Kelvin.) Absolutely COLD light located behind copy board. This same lighting system is used for lighting glass positives.

No. 14. Full dial extended diaphragm lens control . . . No metal stops . . .

No. 15. Camera is driven by a worm drive not by chains. Cast from aluminum alloy to ensure perfect registration . . .

No. 16. Automatically controlled Electric controlled Flash gun that can be set for the various filter factors for direct screen separations.

Camera is all metal cast. Copy board 28 x 30 full tilt. Made for 19½ inch Max Levy circular screen for full size 11 x 14 color separation negatives. Reversal of negatives by the Lectrochrome semi Dialating system installed in camera. Camera loads either from side or back (side for reversals and back for straight negative work). Calibrated synchronized reductions and enlargements on metal indicators.

WRITE FOR PRINTED BOOKLET

INTERNATIONAL RESEARCH LABORATORIES

228 SEVENTH AVENUE — EST. 1921 — NEW YORK, N. Y.

Manufacturers of ALL METAL COLOR PROCESS ENGRAVING CAMERAS—ONE SHOT COLOR CAMERAS—DENSITOMETERS—ELECTRICAL COLOR CONTROL INSTRUMENTS

America's leading color supplies and clearing house for all color photomechanical problems

SENEFELDER

LITHOGRAPHIC SUPPLIES

Everything to make the job easier

PRESSROOM MATERIALS

LITHOGRAPHIC ZINC PLATES

At present over seventy-five per cent of all lithographic work is produced from zinc plates. The majority of lithographers throughout the world regard zinc as the best metal for lithographic plates and there is no question that the use of zinc plates for lithography will keep on increasing as the properties of zinc become known more generally and are understood better by the men in the shop.

However, even the highest quality rolled zinc plates cannot be used for lithographic purposes until the rolling scale has been carefully removed in the graining machine and until they have been grained properly. Senefelder grained plates are guaranteed lithographic plates. Their rolling scale has been removed completely and they have been grained and tested by lithographic experts.

Full directions for the correct handling of lithographic zinc and aluminum plates are given in our booklet "Lithographic Plates" which may be obtained on request.

•

Each month we will briefly describe an outstanding item in the Senefelder group of supplies for the lithographer.

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 GREENE ST. NEW YORK, N. Y.

Absorbent Cotton
Acids, Litho
Acid Brushes
Alum Powder
Aluminum Plates
Antifin Rubber Preserver
Asphaltum Liquid
Asphaltum Powder
Berlin Paper
Bronze Powders
Bronzing Pads
Carborundum Powder
Caustic Soda
Cellulose Cleaning Paper
Charcoal Sticks
Chemicals, Litho
China Marbles
Cold Top Enamel
Collodion Emulsion
Columbia Paper
Copierlack
Cornelin Solution
Correction Slips
Counter Etch "Convenient"
Crayon Holders
Crayon Ink
Crayon Pencils
Crayon Transfer Paper
Crayons, Litho
Deep Etch Supplies
Developing Ink
Double Etch Salt
Duralac Lacquer
Egg Albumen
Engrav. Needles
Engrav. Stones
Etches
Excelsior Paper
Felt Daubers
Film Filters
Flannel, Litho
Flint, Graining
Fly Cord
Fountain Etch
French Chalk
Gamburger Slips
Gelatine Foils
Glass Marbles
Glycerine
Graining Marbles
Graining Quartz
Gum Arabic
Hand Rollers
Hydroquinone
Impression Rubber Sheeting
India Paper
Ink Mullers
Ink Knives
Ink Slabs
Liquid Tusche
Litho Inks
Litho Stones
Lump Pumice
Magnesia Carb.
Maple Balls
Mica Powder
Moleskin
Molleton
Mutton Tallow
Negative Brushes
Negative Collodion
Negative Glass
Negative Varnish
Neg-O-Lac
Nitric Acid
Offset Blankets
Offset Inks
Offset Powder
Opaque
Palm Oil
Pens, Litho
pH Slide Comparators
Photographic Gelatine
Planium Etch Salt
Plates, Lithographic
Press Boards
Printing Inks
Process Glue
Process Oil
Proofing Inks
Pumice Powder
Quartz, Graining
Rolling-up Ink
Rosin Powder
Rubber Snake Slips
Rubbing Stones
Schumacher Slips
Scotch Hone
Scotch Slips
Scotch Tape
Scraper Leather
Scraperwood
Senebumen
Senelac Varnish
Sensitizers
Sharp Etch
Snake Slips
Soapstone
Sponges
Steel Balls
Steelclay Marbles
Stone Cement
Strecker Salt
Sulphur Flour
Tracing Blue
Tracing Paper
Transfer Ink
Transfer Papers
Transparency Solution
Tusche
Varnishes
Wire Brushes
Zinc Plates
Etc., Etc.

MODERN LITHOGRAPHY

LITHOGRAPHED IN THE INTERESTS OF LITHOGRAPHERS EVERYWHERE

THE COVER

Thomas Hart Benton, celebrated American artist, has just finished six lithographs to be used in advertising Twentieth Century-Fox's "The Grapes of Wrath," opening at the Rivoli Theatre, New York, Jan. 24. This one, showing the Joads preparing for their memorable trek to California, will be used on 24-sheet posters.

January, 1940
Volume 8 Number 1

In his article on Travel, 1940 Style, beginning on page 14 of this issue Loring G. Peede predicts that travel will enter an entirely new phase of development during the coming year, using literature of a new sort. If the lithographer is to get his share of that business he must come across with some really good creative ideas, Mr. Peede points out. Herbert Paschel, whose article Color Filters and Emulsions begins on page 16, has treated his subject in as simple and understanding a way as he possibly could, and for a purpose. Mr. Paschel, who gets about the country somewhat, says that we assume that the average lithographer knows a whole lot more than he does. He suggests, therefore, an occasional strictly elementary article, such as Color Filters and Emulsions.

Robert F. Reed's article, The Measurement of Ink Consistency, page 22, will be read with interest by all quality-minded lithographers. Mr. Reed is director of research of the Lithographic Technical Foundation, at Cincinnati. Whither Deep-Etch? the article by Kenneth W. Martin beginning on page 26 has some interesting things to say about the future of this process, based on present and recent past developments. We are very pleased to present William Bond Wheelwright, well-known writer on printing papers, to our readers this month. Mr. W's article, which begins on page 27, is the first of a series.

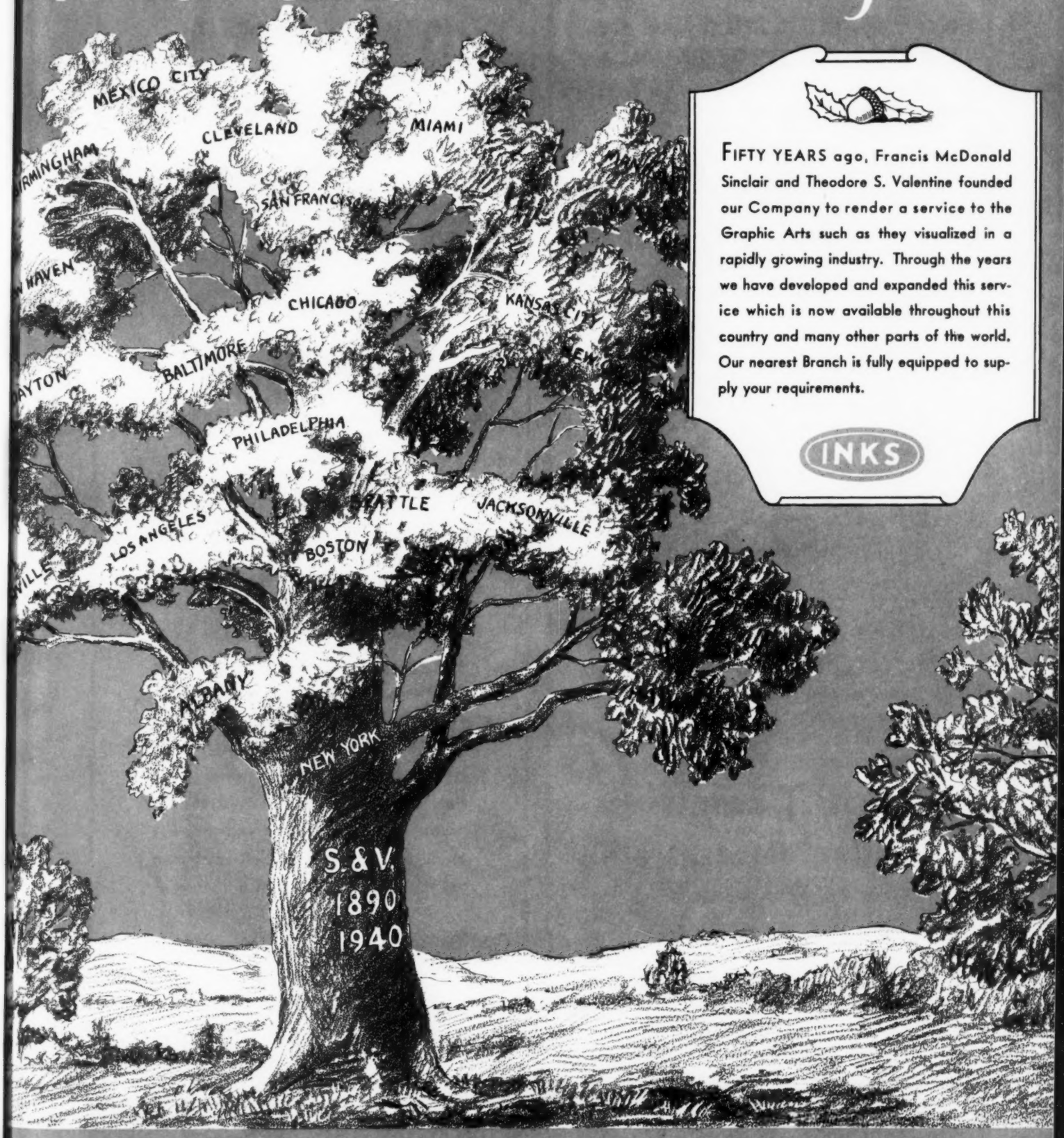
WHAT YOU WILL FIND IN THIS ISSUE

MODERN LITHOGRAPHY

Reg. U. S. Pat. Office

GRANT A. DORLAND, *President;* IRA P. MACNAIR, *Vice-President;* WAYNE E. DORLAND, *Secretary-Treasurer;* RICHARD ROLEY, *Editor;* SAMUEL D. WOLFF, *Advertising Manager.* Official Organ of the National Association of Photo-Lithographers. Published monthly on the 15th by The Photo-Lithographer, Inc., at 254 W. 31st St., New York, N. Y. ADVERTISING RATES: Advertising rates made known on application. Closing date for copy—20th of the month previous to date of issue. SUBSCRIPTION RATES: $3.00 per year in the United States, $4.00 per year in Canada. Single copies, 30 cents. Entered as second class matter, Dec. 29, 1939, at the Post Office at New York, N. Y., under the Act of March 3, 1879.

"Tall oaks from little acorns grow"



FIFTY YEARS ago, Francis McDonald Sinclair and Theodore S. Valentine founded our Company to render a service to the Graphic Arts such as they visualized in a rapidly growing industry. Through the years we have developed and expanded this service which is now available throughout this country and many other parts of the world. Our nearest Branch is fully equipped to supply your requirements.

INKS

WHEREVER YOU ARE THERE'S A PLANT TO SERVE YOU

Sinclair and Valentine Co.

Main Office and Factory: 611 West 129th Street, New York

Fifty Years of Service to the Graphic Arts

You reproduce from Type..

...but are you getting the best Typesetting?

IT'S NO SECRET—firms belonging to the Advertising Typographers Association of America are the world's best advertising typesetters. Advertisers, publishers and buyers of printing everywhere concede this without an argument. Our A-T-A companies have the expert craftsmanship and extensive modern equipment to back up this reputation for better work. We're proud of our leadership in this specialized field.

But to those producers of lithography, planograph, rotogravure and allied arts who continue to disregard A-T-A service on the grounds that it is "too expensive," we have a straight-from-the-shoulder message. A-T-A service, instead of being costly, is *actually a material saving* and *a source of greater profit* for you. Here's the reason:

You are billed for a typesetting job on the length of time required to do it. By handling your composing work more skillfully and accurately, we eliminate the waste time which comes from revisions, corrections and other faults of careless and less skilled compositors. Check up at the end of the month and you'll discover to your delight that you have accomplished more, turned out superior work, had no composition worries —*and saved money!* You want your customers to have the best. Isn't that a pretty good reason for adopting A-T-A service?

Get acquainted with one of our member companies. You'll be surprised at the extent of his equipment, the tremendous range of type faces he carries, the ability and service of his staff. But you'll also be surprised at how much he knows about *your* business—his intimate knowledge of proofing on glassine, bronzine, celluloid and such mediums, and other phases of the work you do. You'll find this A-T-A member will work hand in hand with you in a combination that means *better work, less worry* and *more profits!* Better phone him today!

THE Advertising Typographers Association OF AMERICA • INC.

members

AKRON, OHIO
The Akron Typesetting Co.

BALTIMORE, MD.
The Maran Printing Co.

BOSTON, MASS.
The Berkeley Press

BUFFALO, N. Y.
Axel Edward Sahlin Typographic Service

CHICAGO, ILL.
Advertising Typographers, Inc.
Arkin Typographers, Inc.
Bertsch & Cooper
J. M. Bundscho, Inc.
The Faithorn Corp.
Hayes-Lochner, Inc.
Runkle-Thompson-Kovats, Inc.

CINCINNATI, OHIO
The J. W. Ford Co.

CLEVELAND, OHIO
Bohme & Blinkmann, Inc.
Schlick-Barner-Hayden, Inc.
Skelly Typesetting Co., Inc.

DALLAS, TEXAS
Jaggars-Chiles-Stovall, Inc.

DAYTON, OHIO
Dayton's Typographic Service

DENVER, COLO.
The A. B. Hirschfeld Press

DETROIT, MICH.
The Thos. P. Henry Co.
C. Benj. Stapleton Co.
George Willens & Company

INDIANAPOLIS, IND.
The Typographic Service Co., Inc.

KALAMAZOO, MICH.
Claire J. Mahoney

LOS ANGELES, CAL.
William Carnall
House of Hartman
Samuel Katz-Typographer
Rising-Hammond, Inc.

MONTREAL, CANADA
Fred F. Esler, Ltd.

NEW YORK, N. Y.
Ad Service Co.
Advertising Agencies' Service Co., Inc.
Advertising Composition, Inc.
Artintype, Inc.
Associated Typographers, Inc.
Atlas Typographic Service, Inc.
Central Zone Press, Inc.
Diamant Typographic Service
A. T. Edwards Typography, Inc.
Empire State Craftsmen, Inc.
Frost Brothers
David Gildea & Co., Inc.
Graphic Arts Typographers, Inc.
Hanford Hardin, Inc.
Huxley House
King Typographic Service Corp.
Master Typographers, Inc.
Morrell & McDermott, Inc.
George Mullen, Inc.
Chris F. Olsen, Inc.
Frederick W. Schmidt, Inc.
Superior Typography, Inc.
Supreme Ad Service, Inc.
Tri-Arts Press Inc.
Type Arrangement, Inc.
Typographic Craftsmen, Inc.
Typographic Designers, Inc.
Typographic Service Co.
Kurt H. Volk, Inc.

PHILADELPHIA, PA.
John C. Meyer & Son
Progressive Composition Co.

PORTLAND, ORE.
Paul O. Giesey

ST. LOUIS, MO.
Brendel Typographic Service
Warwick Typographers, Inc.

SAN FRANCISCO, CAL.
Patterson & Hall
Taylor & Taylor

SEATTLE, WASH.
Frank McCaffrey

TORONTO, CANADA
Swan Service

Executive Offices—461 Eighth Ave., New York City. Albert Abrahams, Executive Secretary

What Are Today's Economic Hourly Rates and Production Standards?

THE National Association of Photo-Lithographers has retained William Arthur Clark, Certified Public Accountant, Public Ledger Building, Philadelphia, Pa., to revise economic hourly rates for all equipment used in the lithographic industry.

Mr. Clark has had many years of experience in the graphic arts industries.

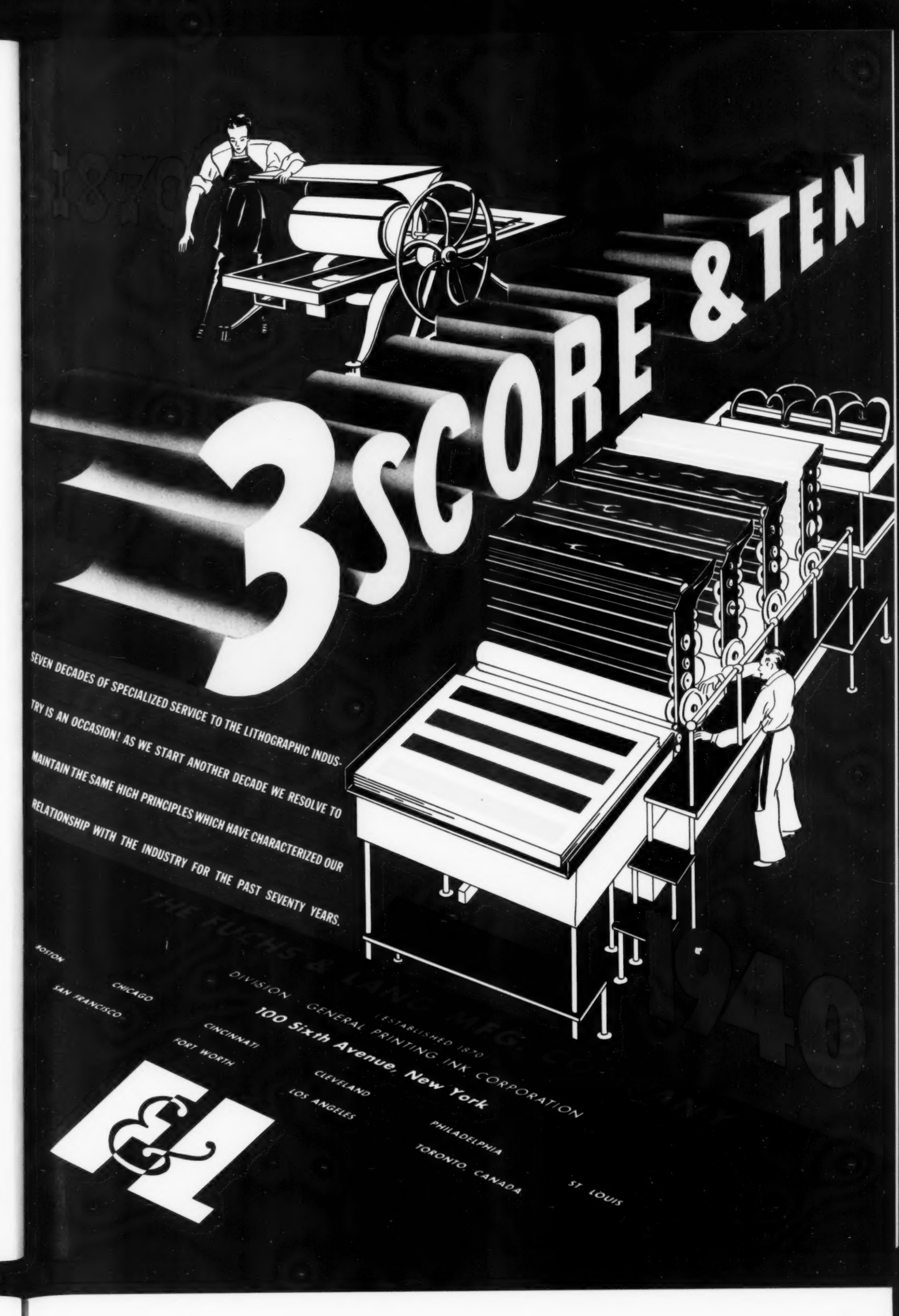
The National Association of Photo-Lithographers cordially extends an invitation to any owner of lithographic equipment whether a member of the NAPL or no, to participate in this endeavor.

Lithographers maintaining cost systems who will cooperate with authentic cost information can secure economic hourly rates and production standards which will reflect present day costs by cooperating in this vital work.

For further information please write to William Arthur Clark, C.P.A., Public Ledger Building, Philadelphia, Pa.

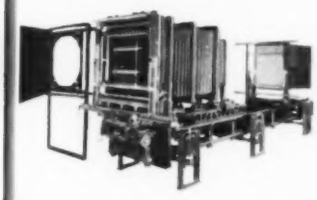
National Association of Photo-Lithographers

1776 Broadway, New York, N. Y.

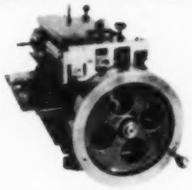

3 SCORE & TEN
SEVEN DECADES OF SPECIALIZED SERVICE TO THE LITHOGRAPHIC INDUSTRY IS AN OCCASION! AS WE START ANOTHER DECADE WE RESOLVE TO MAINTAIN THE SAME HIGH PRINCIPLES WHICH HAVE CHARACTERIZED OUR RELATIONSHIP WITH THE INDUSTRY FOR THE PAST SEVENTY YEARS.
1940
DIVISION GENERAL PRINTING INK CORPORATION
ESTABLISHED 1870
100 Sixth Avenue, New York
BOSTON
CHICAGO
SAN FRANCISCO
CINCINNATI
FORT WORTH
CLEVELAND
LOS ANGELES
PHILADELPHIA
TORONTO, CANADA
ST LOUIS


Ever since the stone age
&
Everything for the Lithographer

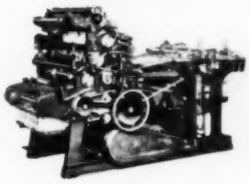
STEP AND REPEAT CAMERAS



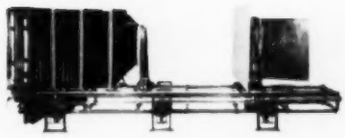
LABORATORY COATING MACHINES



OFFSET PRESSES



PROCESS CAMERAS



PRESS PLATE WHIRLERS

FLAT TIN BRONZING MACHINES

LICENSE TAG COATING MACHINES

LITHOGRAPHIC HAND PRESSES

OFFSET COLOR PROVING PRESSES

VACUUM FRAMES

METAL DUSTING MACHINES

"If you don't see what you want, ask for it" . . . an old merchandising slogan . . . well, that goes for us too! We can't possibly portray every machine we make, nor can we list the special machinery we have designed and built to order. But if you write to us and tell us your problem, then we'll show you what we can do for you.

Rutherford MACHINERY COMPANY

DIVISION

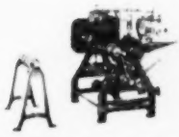
GENERAL PRINTING INK CORPORATION

NEW YORK • CHICAGO • SAN FRANCISCO

100 Sixth Ave. 608 So. Dearborn St. 1425 Folsom St.

ROLLER EMBOSSING MACHINES

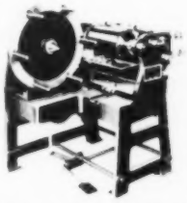
"STREAMLINE" SPOT COATING MACHINES



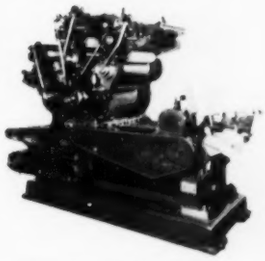
"STREAMLINE" METAL COATING MACHINES

SUCTION ENLARGING BACK FOR FILM OR PAPER NEGATIVES

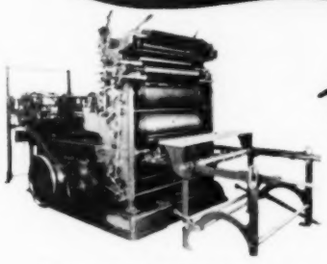
RUBBER TRANSFER CYLINDER HAND PRESSES



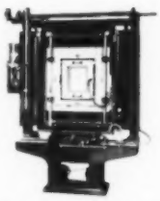
COLLAPSIBLE TUBE COATING MACHINES



SPECIAL MULTI-COLOR DRY OFFSET PRESSES

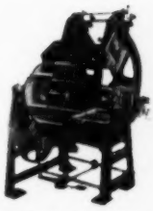


"STREAMLINE" ROTARY METAL DECORATING PRESSES



JUNIOR PHOTO COMPOSING MACHINES

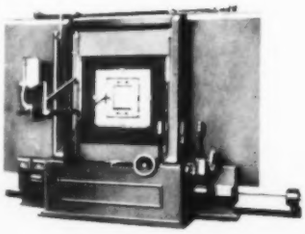
WHIRLERS FOR GLASS PLATES



TWO COLOR TUBE COATING MACHINES

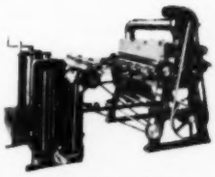
PHOTO-LETTERING MACHINES

GRAINING MACHINES



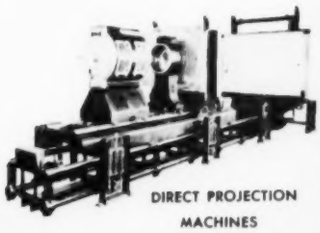
PRECISION PHOTO COMPOSING MACHINES

AUTOMATIC SUCTION PILE FEEDERS (attached to Coating Machine)



AUTOMATIC PILE LIFTS (attached to Dusting Machine)

MULTI-COLOR COLLAPSIBLE TUBE PRINTING MACHINES



DIRECT PROJECTION MACHINES

EDITORIALS

THE move on the part of the National Association of Photo-Lithographers to adopt a controlled training program for lithographic salesmen during 1940 deserves the attention of everyone interested in the future of the offset industry. We have always thought it paradoxical that an industry which has made such outstanding progress in methods of manufacture should be so woefully backward in the selection and training of its sales personnel. We have heard veteran salesmen remark that they got their start by being given a territory, some names, some dog-eared samples and the bum's rush. This procedure dampened the ardor of the most enthusiastic salesman and took as much fight out of him as a well-placed blow to the solar-plexus. The result was, of course, an unnecessarily high turnover rate among salesmen with a loss in time, profit and goodwill for the concerns involved. Thus, the adoption of a standard sales training course for litho salesmen in 1940 by the N.A.P.L. is a laudatory step forward and we hail it as one of the major bright spots on 1940's horizon. Equally encouraging are two additional objectives on the N.A.P.L. agenda during the coming year:—the revision, to include present day increased costs, of all hourly rates and production standards for all equipment operated in the lithographic industry; and the adoption of a comprehensive cost system for lithographic plants. Not only will N.A.P.L. members be the benefactors in this program, but every firm in the industry as well.

FROM a mid-west lithographer we have noted a large mailing piece quoting reduced prices "on all your printing requirements during the coming year." In effect the copy goes on to advise that "no matter how low a quotation you can get elsewhere we can always quote one lower." Evidently these mailing pieces have been sent broadcast, and as a result of this, the damage which they can do to the entire lithographic industry, black and white and color, is considerable. We could tell this lithographer an interesting story about a firm which used to secure a large volume of business by methods very similar to this. But, sad to relate, the firm evidently did not make any money slashing prices, and ended up where such lithographers usually end—out of the picture.

THE outlook for increased sales of lithography during 1940 is colored, of course, by the outlook for advertising as a whole. While the trend seems to be towards larger appropriations for point-of-sale advertising, car cards, outdoor, and direct mail there are a number of factors which the overly optimistic might take into account. Uncertainty created by European developments, fear of violating advertising provisions of the Wheeler-Lea and the food and drug laws, and a desire to cut selling costs made advertisers cautious in 1939, with the result that the volume of expenditures increased only 4 to 5 per cent over that of the previous year. Thus only a part of the 13 per cent loss in 1938 was made up.

Other factors such as the diversion of substantial funds to the New York and San Francisco Expositions, the belief among advertisers that they could "coast" on the strength of these exhibits, and the sellers' market in the latter part of the year also were responsible for holding down advertising budgets. Virtually all of these factors are operating again in 1940.

While nearly everyone is agreed that advertising expenditures will be higher in 1940 no one is prepared to hazard a guess as to how they will compare with 1939. One thing is fairly certain, competition between the different media for the advertiser's dollar will be keen, with those media which are prepared to show actual case histories of successful campaigns the favorites. The consumer movement has made the advertiser wary of any sort of promotion which is experimental or which cannot prove to be paying its way.

by Loring G. Peede

With Europe blacked out, travel will enter a new phase of development in 1940, requiring sales literature of a high order of originality and appeal

WHEN the war broke, the travel business collapsed faster than a Miami Beach cottage in a hurricane. Not that travel itself had come to a standstill. Far from it. In fact, travel in 1940 bids fair to top that of most any recent year, with consequent more business for creative lithographers. Then what is this about the travel business having collapsed?

It is simply that most of the publicity, promotion and fanfare of the travel industry is concerned with steamships and ocean travel, and with countries now at war or likely to be. The income from steamship passages and cruises has always furnished the bulk of the commissions of travel agencies — and travel agencies are the sales front of the travel business.

The war brought about 1) the discontinuation of tourist passports or visas for most European and all war zone travel; 2) the cancellation of cruise schedules and various services by belligerent-owned lines; 3) a break in the continuity of newspaper, magazine and direct advertising; and 4) the financial undermining of an active and widely useful travel bureau service numbering several thousand accredited agents and sub-agents.

As for the travel business as a whole, and the more pertinent matter of the volume of printed pieces which

TRAVEL
1940 STYLE

may be employed in its sales promotion, there is no reason to assume that there will be any net loss whatsoever. As first stated, 1940 bids fair to being a big year. Copy themes will be different, that's all.

The whole European travel and personal expenditure item, labeled by the statisticians "invisible exports," is estimated at about $500,000,000 a year, including everything from a Stratford-on-Avon souvenir album to a son-in-law with a doubtful title. The total travel and recreation bill for this country ran to $5,000,000,000 in 1939, and, according to R. T. Reed, vice-president of American Express Co., should run to $6,000,000,000 in 1940. The European trippers as a class are people much on the move. Summer will find most of this group estivating somewhere in the Western Hemisphere other than on their own doorsteps.

Though many of those whose travel urges lean definitely towards Europe may not find substitutes in Latin America, the West Indies or Canada, it is estimated by travel experts that increased business in these directions will considerably offset the European loss. Grace Line, for instance, already has reported gains of between 30 and 40 per cent in both its West Coast-South American service and its West Indian cruises.

Cuba, Bermuda, Puerto Rico and especially Mexico are all looking forward to exceptionally heavy tourist seasons. Many believe that both long-cruise and tourist travel will be greater in all sections of South and Central America than ever before. Clipper reservations have in some instances been made two months in advance. Air travel makes it possible to cover much of the South American continent within the limits of a normal holiday. Travel, of course, still beckons the globe-trotter from the Pacific side, from Hawaii, the South Seas, Australia, New Zealand, India, Malaya and even Japan. Alaska and North and South Africa are also being promoted.

But as the publicity head of the American Express Co. has put it, the motto for 1940 is "Rediscover the Americas," with the accent on the U.S.A. and its streamlined trains, buses, coastwise and inland steamers, airplanes, autos and trailers; its facilities for winter sports, summer sports, fishing, hunting; and its beaches, mountains, lakes and dude ranches. Practically every state in the Union boasts of being the nation's playground.

It is within this vast 5 to 6 billion dollar domestic travel and recreation field that the major opportunity for the creative lithographer lies. While foreign travel pieces are often more elaborate and expensive, the total of such business is small in proportion. A great deal of it has always been produced abroad. A few firms have controlled the business of producing the sales literature of the steamship lines. But domestic travel and resort business originates in most any city or country and is open to a number of firms.

MORE than any other, the year 1940 calls for new travel advertising literature of special and precise appeal. The travel sections of the newspapers reflect a tendency to inject foreign flavor—"The Riviera of the Pacific" or "A Bit of Denmark in Nevada" are examples, but enticements of this order would seem to be pretentious and derivative.

A *Fortune* survey published a year ago provides some valuable statistics which ought to be kept in mind when slanting travel copy. It shows that vacation preferences differ between men and women; that August, July, February, March, January and September are the more popular vacation months, in that order. It shows that the seashore is the most popular vacation spot, summer or winter, and especially so in winter when its choice is almost 2 to 1 against all other attractions. It shows that mountains are most popular in fall and decreasingly so in summer, spring and winter; that the appeal of the country is definitely of the fall and springtime; but that lakes rate best with summer vacationists.

Fortune's findings suggest both the nature of the appeal to use and when. They show the need for specialized appeals tied in with sports and hobbies. *Fortune* found swimming and golf both top favorites as sports with both men and women. After that men's preferences fell in the order of fishing, boating, tennis, horseback riding, hiking and hunting; while women's preferences were for boating, hiking, tennis, fishing and riding in that order.

Competition among resorts and vacation spots grows keener each year. It is safe to say that it will be keenest in 1940. Consequently travel copy will have to be more specific and direct, and layouts less stereotype. Booklets and folders of resorts will have to carry something more definite than pretty pictures and fine phrases. For example, there are now 200 places in the East listed as winter sports centers. Today 141 of these feature ski lifts—six years ago there was but one. Such copy themes as "Guest Plantations," in the South, and "Gringo Haciendas" over the line into Mexico, suggesting the flavor of the old South and the old Mexico, are two current examples which indicate the trend.

The job of producing the printed promotional matter of airlines and

(*Turn to page 53*)

COLOR FILTERS

By Herbert P. Paschel

OFTENTIMES a lithographic shop is confronted with the problem of making an accurate photographic reproduction of copy containing a combination of colors. Such copy matter may be typewritten material in which the type is of one color and the paper stock another. Then again the copy may be a piece of art work, or perhaps a client may submit a previous reproduction for a re-run. When confronted with work of this nature, the inexperienced photographer may be uncertain as to the proper technique to follow. Since a photographic emulsion is sensitive to color in a definite manner and since the colored rays reflected by the copy can be intercepted by filters and thus controlled, a thorough understanding of the characteristics of photographic emulsions, filters and light is helpful.

We know that the sensation of color is the reaction of certain elements in the human eye to external stimuli produced by wavelengths of light. We know that white light, for example, contains a mixture of all the wavelengths in the visible spectrum, and that a specific color is in reality white light minus certain wavelengths. An object that reflects only certain wavelengths will excite the elements of the eye unequally and the sensation of a specific color is the result. Light sources, such as the sun, arc-lights, tungsten and fluorescent lamps yield "true light" or "true color" because they are the true sources of the radiations. For example, surface colors, such as oil and water colors, printing inks, etc., are not "true colors" for they owe their color to the light falling upon them. Surface colors are classified as pigments and assume their color by absorbing certain wavelengths from the light by which they are illuminated. Since they subtract certain wavelengths from their illuminant, they are called "minus" colors.

Therefore, since a surface color (and all copy matter is composed of surface color) assumes its color by absorbing a certain part of the light falling upon it and reflecting the remainder, we can increase the relative contrast, i.e., render it darker, by

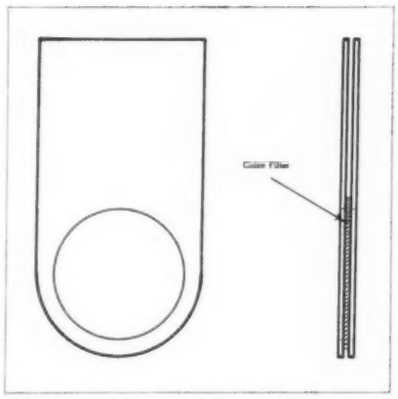
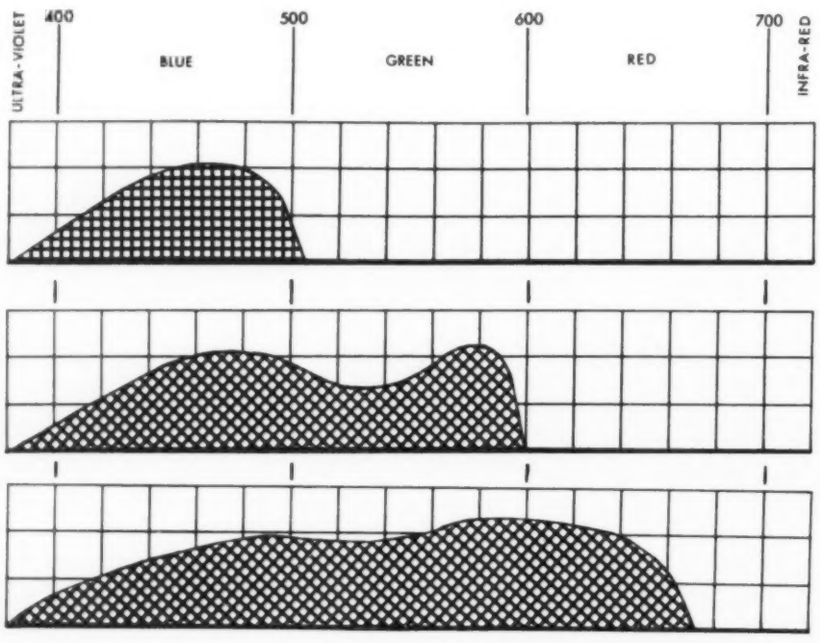


Fig. 1 (above). Gelatin filters should be mounted between two pieces of thin cardboard cut to the shape of the Waterhouse stop, for protection.

Fig. 2. Sensitivity curves of the three most common emulsions. Top, color blind; center, orthochromatic; and bottom, panchromatic.



and Emulsions

An elementary article on the relation of filters, emulsions and light in the reproduction of color copy.

removing that part of the white light normally reflected by that color. On the other hand if we desire to weaken or drop-out a color, i.e., reproduce it as white, we can accomplish this by removing from the white light those wave lengths which are normally absorbed by that color. Hence, though it is possible to alter the color value of light sources, a practical method is to intercept the reflected light before it strikes the film or plate and absorb from it the desired wavelengths. This means of control is afforded by color filters.

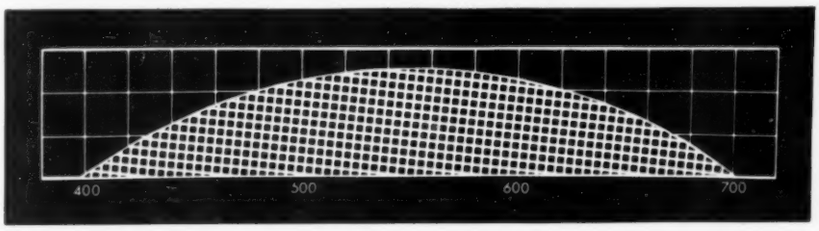
A color filter is essentially a transparent, colored material which permits radiations of certain wavelengths to pass through but retards the penetration of all other wavelengths. It is necessary that a filter introduce no optical distortion since the clarity, size and sharpness of the image would thus be destroyed. Color filters are obtainable in three forms: thin dyed gelatin films, gelatin filters cemented between two pieces of white optical glass and stained optical glass. (Recently colored filters have been made from various transparent plastic materials but this form is not yet available commercially.) The plain gelatin filters are the most widely used. To prolong their life and to prevent them from becoming fingermarked or otherwise damaged, they are mounted between two thin pieces of cardboard which have been cut to the shape of the Waterhouse stop of the particular lens employed (Figure 1).

Photographic filters are classified as follows:—

(a) Compensating filters. These restrain the action of certain rays to a minimum degree while permitting the other wavelengths to transmit freely. Light medium yellow filters belong to this group for they hold back the blue rays to a certain extent without, however, completely absorbing them. When working with aged or discolored copy, the use of a yellow filter is very effective.

(b) Contrast filters. To absorb completely or to transmit only certain rays of light and therefore to lighten or intensify certain colors, heavy filters are used. If we wish to reproduce a particular color as white, the color filter must freely transmit the same wavelengths of light that are reflected by that color. On the other hand, should a filter completely absorb the rays of light reflected by a particular color, no effect is produced on the negative and the color will therefore reproduce as black.

Fig. 3. Approximate color response of the normal human eye to the visible spectrum. The numbers indicate the lengths of the waves in millimicrons.



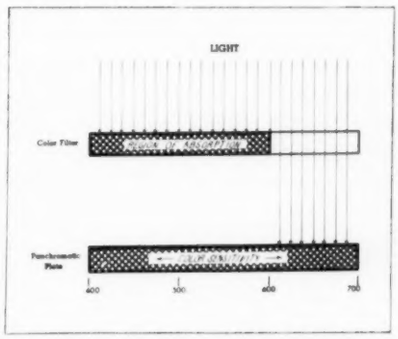


Fig. 4. This illustrates the degree of absorption of light by a red filter, showing that the transmitted light affects only a small part of the panchromatic sensitivity.

AN INTERESTING experiment that can be conducted by every photographer is to take a piece of white paper or cardboard and place small patches of red, green and blue inks on it. Put this on the copyboard and illuminate it by means of the arc-lights. By light from the arcs, we see those patches in their correct color. Then view the ink patches through a red filter. The red ink patch will appear to merge with the paper; i.e., it will have approximately the same tone through the filter as the white paper while the green and blue areas will

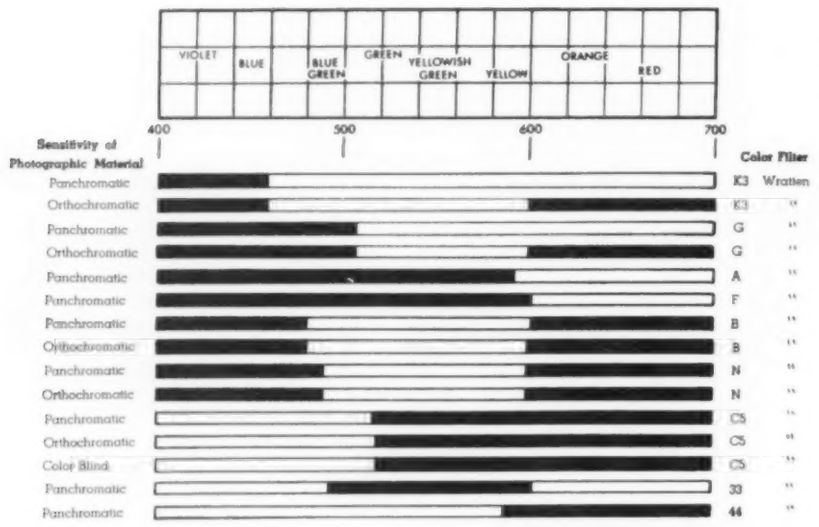


Fig. 5. Chart showing how the various colors reproduce when photographed through different filters on the three common emulsions.

appear black. The explanation is that the red ink absorbs the blue and green waves but reflects the red rays of light which are transmitted by the filter; the white paper reflects red, green and blue but the color filter permits only the red rays to pass. Therefore the visual effect from both the red ink patch and the white paper is virtually the same. The green and blue areas however completely absorb the red rays so no rays are reflected, consequently they appear black.

The experiment may be continued with green and blue filters and in each case it will be observed that the ink patch corresponding to the filter color will appear lighter whereas the other two patches will appear darker. Such filters completely absorb certain colors and only transmit a limited region. These filters belong to the "contrast" group. When viewing the ink patches through a light yellow filter such as a K1 we notice very little change in the appearance of the red and green areas, but the blue patch appears slightly darker but still blue. These light yellow filters only absorb a very small percentage of the blue rays and are called "compensating" filters.

Only the light that is transmitted by a filter can affect the sensitive emulsion. The emulsion must therefore be sensitive to light transmitted by the filter. Figure 2 shows the sensitivity of the three most common photographic emulsions. Color-blind emulsions are senstitive to ultraviolet and blue. Orthochromatic emulsions are sensitive to ultraviolet, blue, green and yellow, while the panchromatic emulsions are sensitive to the entire visible spectrum and most closely approximate the sensitivity of the human eye (Figure 3).

Since a filter subtracts a certain portion of the total light, it is obvious that a longer exposure is necessary when using a filter. In Figure 4 is shown the approximate transmission of a red filter. We see that about one-third of the white light reflected by the copy is permitted to pass through the filter. In addition we see that only about one-third of the emulsion sensitivity is affected by the light transmitted by the filter. This is the reason for increased exposure when using a filter. The number of times the exposure must be increased when using a filter is known as the filter factor. The factor depends upon the total transmission of the filter, the color sensitivity of the photographic material and the color value of the light source employed. Manufacturers of photographic plates and films usually supply filter data with each package, thereby eliminating the need for the individual operator to make his own filter factor determination.

The problem of accurate reproduction of colored copy becomes very simple indeed when all of the phases which influence color rendition are understood and controlled. The first step is the selection of the film or plate to be used. By referring to Figure 2 we see that color-blind emulsions have a very limited sensitivity. Blues can be recorded on color-blind emulsions but greens, yellows, oranges and reds will make no effect and will consequently reproduce as black. It becomes obvious that, if the job on hand requires green, yellow, orange or red to be reproduced as black, it can be successfully accomplished on a color-blind film or plate without resorting to the use of filters. It also becomes obvious that it is useless to use green, yellow, or red filters in conjunction with films and plates of this type for no exposure will be the result. To reproduce heavy blues as white, a blue filter will do the trick; whereas, with certain light blues, a slight overexposure will prove adequate.

REFERRING again to Figure 2, the sensitivity of orthochromatic emulsions show that reds and oranges will produce no effect and consequently record as black. However, certain light reds may possess enough yellow reflection to cause a slight exposure. To overcome this, if desirable, a blue-green filter will absorb this slight reflection and insure a black recording of the reds. To reproduce blue, green and yellow as white use blue, green and yellow filters respectively. We see, too, that the use of red filters is useless with orthochromatic emulsions because of the absence of red sensitivity. The curve of panchromatic sensitivity reveals that all colors can be reproduced as white when filters are used which transmit freely the wavelengths reflected by those colors. To record a color as black on panchromatic materials, the filter should absorb that color completely.

Many determinations, as to the technique to follow with a particular color copy, may be made visually. Simply view the copy through color filters and, when you have found the filter that gives you the proper visual relationship of the colors, use that filter with a film or plate that is sensitive to the color transmitted by the filter. For instance, if you have copy containing

(*Turn to page* 53)

POSTER STAMPS . . .

a new advertising medium

SELDOM, if ever, does a really new creative printing idea offer itself out of a clear sky, tailor-made, so to speak, for the offset lithographer. Yet that is pretty nearly what has happened with the development of the poster stamp as an advertising medium. A few years ago when a mid-western advertiser, fishing around for a new promotion stunt, hit on the idea of a series of poster stamps depicting historical episodes famous in American history, to be used as premiums for advertising his product, he didn't dream that he was giving birth to something which in the short span of a few months would develop into a national hobby—that of collecting poster stamps, just as postage stamps have been collected for years. Or maybe he did know what he was about. No matter. Whether by accident or design, the poster stamp as an advertising medium is here to stay, and its arrival has opened up new markets for offset lithography, with possibilities for sales on the part of the creative lithographer, we are told, as yet untouched.

For example, in the past two years 76 organizations used poster stamps for some form of promotion. Interest on the part of the consumer has become so great it is estimated that between twelve and fifteen million families in the United States are now collecting these stamps in series, as a hobby. Adults as well as children are interested in collecting them because they are colorful, educational and inexpensive to obtain. An organization known as the National Poster Stamp Society has been formed in Chicago to act as a clearing house for information on poster stamps, which issues a bi-monthly magazine known as the *Poster Stamp Bulletin.*

News of the growing popularity of this new medium has been more or less noised about the trade during the past year. A few lithographers, scenting the possibilities, have gone after the business with, in some instances, promising results. Others have bided their time, feeling, perhaps that the poster stamp was a passing

Tide-Water Associated Oil Co., San Francisco, used magazine and newspaper advertisements and displays to promote its Romance of the West poster stamp series. The company distributed over 90,000,000 of these.

fad, and that its usefulness as an advertising medium would therefore be soon outmoded. To the former group of lithographers, MODERN LITHOGRAPHY reports encouraging prospects for the year ahead. Based on replies to a questionnaire sent to a number of advertising directors whose companies used poster stamp campaigns in 1939, all replied that they planned more extensive poster stamp advertising in 1940; and based on interviews with the advertising directors of a number of companies whose products lend themselves to poster stamp advertising, but which had not used that medium in 1939, over 60 per cent declared that appropriations for poster stamps were included in their 1940 budgets, although these budgets had not as yet been finally approved (as of mid-December). To the latter group of lithographers, the skeptics, MODERN LITHOGRAPHY reports that based on the questionnaires just cited, the poster stamp is not likely soon to be outmoded, for all queried declared that they were immensely pleased with results in 1939. (The fact, as reported above, that they planned to increase their appropriations for this medium attests to that). All felt that the poster stamp had earned a permanent place in their advertising budgets.

The poster stamp has won its spurs as an advertising medium of no small proportions on the basis of its effectiveness as a (1) premium, (2) good-will builder, (3) means of raising money, (4) collector's item just as postage stamps, coins, etc., and because of its (5) beauty, and (6) low cost per circulation unit. These last two items are especially important from the lithographic angle, for such poster stamp series as the National Wildfire Series, the Lincoln Series, the Presidential and Historical Series of recent production were collected for their beauty, and since they were turned out in literally carload lots, it is safe to say that no other process could have produced them with such results at so low a cost.

Naturally, the effectiveness of the poster stamp as an advertising medium is dependent on the way in which it is used. The case histories of successful users should, for that reason, be of interest. Here are a few:

In 1936, American Oil Co. produced a series of 32 different stamps, using as subject matter the Presidents of the United States. It distributed four of these poster stamps every two weeks through its American Oil gas stations, and also made available an album in which to save them. Any adult could get them or any child accompanied by an adult. So successful were they that the company distributed over 70,000,000 poster stamps during its campaign and repeated with a new series the next year. This campaign proved twice as successful as the first. Over 130,000,000 stamps were distributed. Distribution took place primarily on the Atlantic Seaboard. They were printed by offset. Displays were used at dealers' stations to tie in.

In February, 1938, the National Wildlife Federation decided to use poster stamps as a medium to raise money for the conservation of wildlife. It produced a beautiful series of lithographed animal and bird pictures and sold them in sheets of 100 for $1.00 a sheet. There were only 16 different stamps in the actual series, but six complete series were produced on a sheet of 100 stamps, plus a few duplicates. Direct mail was used as the primary means of selling these poster stamps. They were so successful that many hundreds of thousands of dollars were raised and a new series produced in 1939. We understand that this new series proved to be twice as successful as the 1938 series and that it is intended to continue this each year for a period of five years.

Last Spring, Armour & Co. produced their famous series of Snow White Poster Stamps as a means of proving to their dealers that Armour advertising in newspapers and magazines would bring new customers to their stores. They produced 5,000,000 sets of these stamps, or 40,000,000 individual poster stamps. This campaign was so successful that they distributed these 5,000,000 sets in less than ten days, although their campaign was to have lasted for three weeks. Officials from Armour & Co. stated that this idea was one of the most successful that they have ever used and that the demand was so great they could have easily distributed ten million sets.

Last Summer, Tide-Water Associated Oil, of San Francisco, used poster stamps as a means of increasing gasoline sales in its dealers' stations in the west. It produced 20,000,000 poster stamps, consisting of 100 different subjects on scenic and historical subjects of the west, and also produced an album for the stamps. While certain stamps were available at all stations, other poster stamps were available only in certain parts of the country. This made it necessary for a collector to drive to various parts of the country to get the complete set, thereby consuming more gasoline, or else write to friends or relatives who lived in those districts. This plan succeeded so well that the company eventually distributed over 90,000,000 poster stamps. Last December the company sent out 1,000,000 cards to people in the various territories asking them if they liked the series. The response was overwhelming.

In January, 1939, Skelly Oil Co. produced its "Captain Midnight's Air Heroes" series. This was announced on the company's radio program and within a period of two weeks 650,000 sets or 10,500,000 individual poster stamps were distributed. We understand that the idea of poster stamps was the most successful medium of promotion that this company ever used in connection with its gasoline promotion or radio program.

In December, 1938, Maple Leaf Milling Co., of Canada, decided to use poster stamps in connection with the sale of its Red River Cereal. It produced a series of 48 different stamps on scenic pictures of Canada and inserted 4 stamps inside of each package of Red River Cereal.' This would necessitate a person buying 12 packages of cereal to get a complete series. It also stated that you could get a beautiful album in which to keep the poster stamps by sending in 10c in stamps or coin to the home office of

Maple Leaf Milling Co. The response was tremendous. The company is now promoting a new series of poster stamps by its radio program, "Red River Days," and by dealers' displays.

Last January the Jewel Food Stores, of Chicago, decided to use poster stamps as a means of increasing its sale of food staples. It produced a series of 100 different stamps on the history of Chicago and also printed an album in which to save the poster stamps. Over 15,000,000 poster stamps were produced on this series. Interest was so great that it distributed over 65,000 albums the first day and 100,000 albums the first three days. To date it has used over 150,000 to fill the requests of customers. The poster stamps were given away with minimum sales of 25c purchases; also a stamp was packed inside of packages of cocoa; tea and coffee, and a special poster stamp was given away each week with a special food item. For the first eight weeks cocoa sales increased 600 per cent, coffee sales increased 75 per cent and tea sales 100 per cent. On its special weekly food item sales increased over normal anywhere from 50 per cent to 340 per cent. Such items as eggs, jello, canned peas, peanut butter were used. Vanilla extract showed an increase of 725 per cent.

Jewel Food Stores, of Chicago, distributed an album with its poster stamp series. Over 100,000 albums were given out the first three days. As a result of its poster stamp advertising the company increased its cocoa sales 600 per cent, its coffee sales 75 per cent and tea sales 100 per cent. On its weekly specials, the company reports that sales increases over normal were as high as 340 per cent in some cases.

CANDY companies, insurance companies, soap manufacturers, chambers of Commerce, bus lines, railroads and hotels are but a few of the many prospects who can use poster stamps as an advertising medium. In fact, any company or organization that reaches dealers is a logical prospect, especially those who use premiums. While there were 57 poster stamp campaigns in 1938, and approximately 85 in 1938, very few companies and organizations realize yet the potential pulling power of poster stamps. Consequently, the lithographer who would like to specialize in this field or add it to his present line stands to reap a reward in the way of increased sales and new customers.

When a poster stamp campaign is produced the lithographer not only has a job of printing on gummed paper but quite likely will be required to print albums in which to save the poster stamps. Since poster stamps have to be publicized just as extensively as any other form of promotion, there will also be the necessity for producing display cards, window streamers, hand-bills, direct mail pieces, letters, envelopes, and many other printed forms of advertising. All of this, of course, adds to the offset printer's sales volume.

Modern offset equipment has eliminated any bugaboo in printing on gummed paper, so there need be no trouble from a technical standpoint. Production can be maintained at a high level. Lithographers and offset printers have, with the new developments in color cameras and plate making, an opportunity to produce unusually beautiful poster stamp series.

Any lithographer or offset printer may become fully informed about poster stamps by writing either the National Poster Stamp Society, 2445 So. Damen Ave., Chicago, the Mid-States Gummed Paper Co., also of Chicago, or McLaurin-Jones Co., Brookcago, McLaurin-Jones Co., Brookfield, Mass., or Paper Manufacturers Co., of Philadelphia.

THE MEASUREMENT of ink consistency

By Robert F. Reed

The consistency of a printing or lithographic ink is the combination of physical properties which determine its printing quality. These properties are usually considered to be body, viscosity, stiffness or softness, length or shortness, lifting properties or tack, depending on the case in hand and the individual's point of view. The nature of the printing process, character of the surface to be printed, temperature, and speed of printing, determine what the ink consistency should be for best results, and the best consistency must be found by experience for each particular set of conditions.

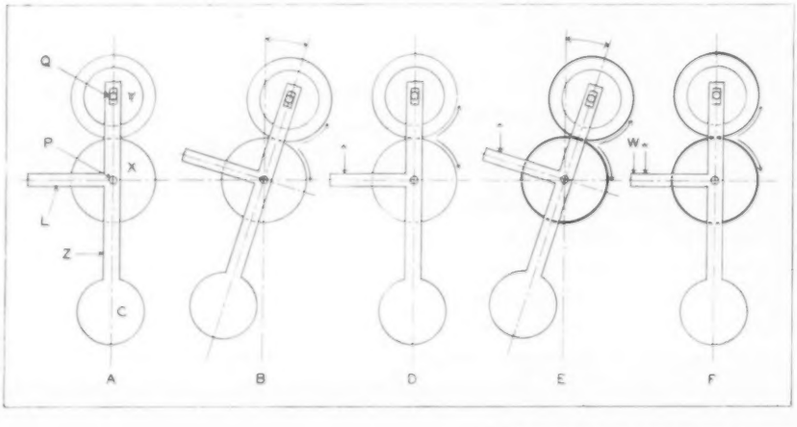
Inks are plastic solids. In the can they often manifest no tendency to flow, but as printing media on the press they are definitely fluid. This change in consistency with agitation or working is a property for which the term "thixotropy" has been recently coined, and which is important but extremely difficult to measure. Because of thixotropy, measurements of viscosity, stiffness, length, or tack of an ink obviously mean little unless made under conditions of working corresponding to actual printing, and duplication of these conditions in a laboratory test has been a difficult problem.

Up to the present the ink man and printer have found no method of controlling ink consistency that does not depend very largely on experience and judgment. What standardization has been accomplished has depended on individual skill in comparing ink samples with "standard samples" from previous runs or deliveries. Such standards have long been known to change consistency with age, a fact which, in most cases, renders them of little or no value as consistency guides. In the case of relatively fluid inks such as news and high-speed web press inks, viscometers have been used with some success to obtain consistency measurements independent of standard samples. With the great majority of letterpress and lithographic inks, however, there has been no substitute for the time-honored finger tests for tack and length made in comparison with similar inks previously found satisfactory. Lack of adequate standards and the necessity for dependence on human judgment has prevented any degree of ink standardization commensurate with modern developments in printing methods and equipment, or with present-day stringent requirements regarding quality and delivery.

The above discussion makes it plain that the ink manufacturer and printer need an instrument which will (1) measure ink consistency under printing conditions, and (2) provide consistency values in numerical terms which are absolute rather than relative to unstable shelf standards. Such an instrument is now available in the Inkometer, a brief description of which follows.

Consistency or body of an ink is generally considered to depend on two properties, tack and length. Tack is stickiness or cohesiveness and is ordinarily estimated as the pull exerted when the finger is lifted sharply out of contact with an ink film on paper, glass, or other surface. Tack manifests itself during printing as the pull required to separate the paper or other printed surface from the printing areas of blanket or plate. Excessive tack results in embossing, picking, and sometimes stripping of the paper sur-

Fig. 1—Diagrammatic Illustration of Inkometer Principle.



face. It also causes excessive heat generation in the ink-distributing system which, in letterpress printing, may result in melting of the composition rollers.

Length of an ink is its capability of being drawn out into threads or filaments and is considered to indicate relative fluidity. Unpigmented oil varnishes exhibit tack and length, both being in direct proportion to viscosity. In the case of inks, however, tack bears a direct relation to viscosity while length does not. Length may exist simultaneously with low tack, and shortness with high tack. Length in inks is a measure of their approach to true fluidity or varnish-like consistency. This is the reason why viscosity alone is insufficient to describe ink consistency.

Tack and length are both altered by working the ink, length to much the greater extent. For this reason no test made under static conditions, or under conditions of working which differ greatly from actual printing conditions, can provide a true measure of printing consistency. Tack and length are also greatly affected by temperature, and their measurements to be of practical value must be made under controlled temperature conditions.

The Inkometer

SIMPLIFIED side views of the Inkometer are shown in Fig. 1, which serve to illustrate the principle of its operation. Fig. 1-A shows the swinging frame in static balance with the rollers free from ink and at rest. Fig. 1-B shows the angular displacement of the swinging frame Z which results from rotating the rollers by driving metal roller X. The force causing this displacement is the resultant of frictional torques in journals P and Q, plus the torque resulting from continuous deformation (internal friction) of the composition covering of roller Y, in the absence of ink. Fig. 1-D shows the balance restored by application of the force w, the moment of which just equals the frictional torques. Fig. 1-E shows the angular displacement of the swinging frame Z when ink is applied to the rollers after they have first been balanced, as in D. Fig. 1-F shows the balance again restored by application of the force W, the moment of which just equals the torque produced by the ink film. An important characteristic of the force w is that it does not change appreciably with speed. The force W, however, changes considerably with speed, and its value and rate of change with speed measure

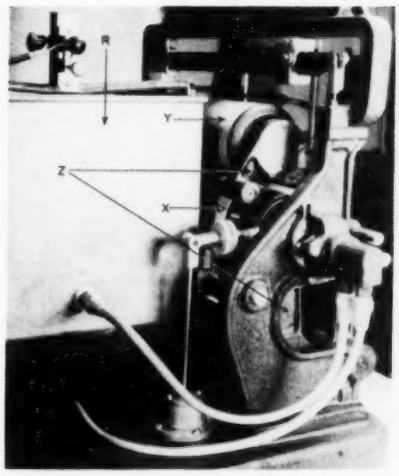


Fig. 3

the printing characteristics of the ink film. The force W represents tack of the ink and is measured by the Inkometer at three different speeds covering a range which includes all normal printing speeds.

Actual views of the Inkometer are shown in Fig. 2 and 3. Its essential features consist of the following:

1. The metal roller X which is driven through a three-speed transmission.

2. The composition-covered roller Y which bears on metal roller X.

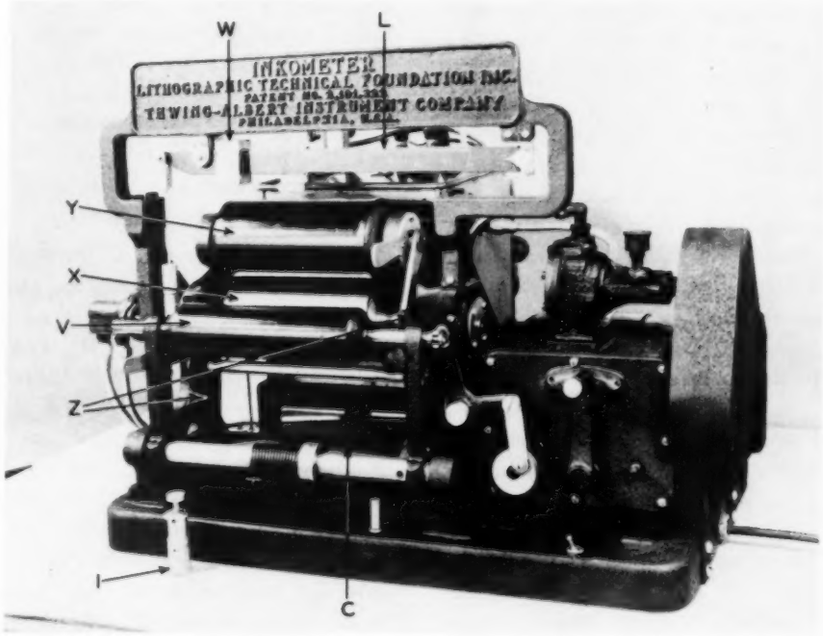
3. The side members Z and fixed counterweight C, which together constitute the swinging frame (see also Fig. 1).

4. The graduated scale beam and sliding weight, which correspond respectively to the side arm L and weight W in Fig. 1, and from which tack readings are taken.

5. The composition-covered vibrating roller V, bearing on the metal roller X, which provides lateral ink distribution.

The driving mechanism consists of a ⅛-horsepower constant-speed motor with gear reduction to a water-circulating pump and three-speed transmission. Standard speeds of 200, 400, and 600 r.p.m. of the metal roller are provided, which correspond to peripheral or linear speeds of 157, 314, and 471 feet per minute, respectively, of the roller surfaces. A 60-cycle synchronous motor is supplied as standard equipment, but a constant-speed direct current motor can be furnished if specified. Temperature is

Fig. 2



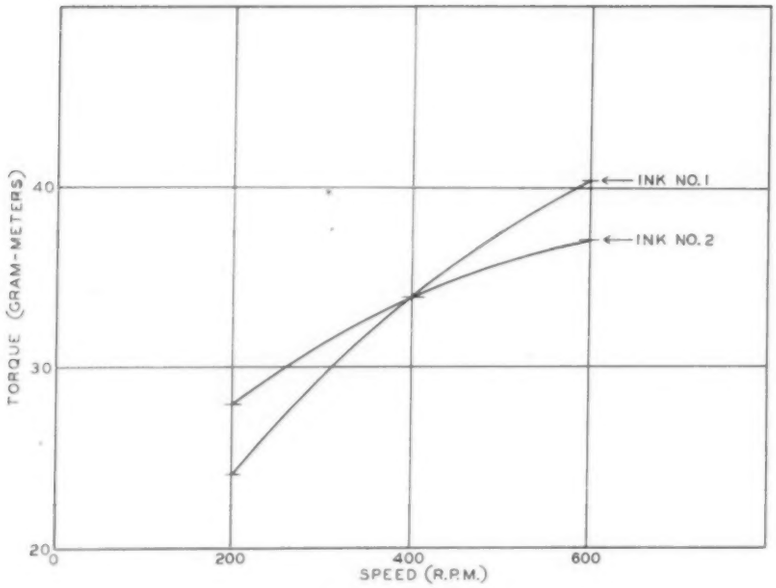


Fig. 4—Typical Graph of Inkometer Results.

controlled by circulating water from a thermostatic reservoir R through the hollow metal roller X.

The ink to be tested is measured volumetrically by means of an ink pipette I which delivers 1.32 cc. (0.0805 cu. in.) of ink with an accuracy of ± 1.0 per cent. When applied to the Inkometer rollers, this volume of ink produces a film 0.00127 centimeter (0.0005 inch) thick, which closely approaches the average ink film carried on the form rollers of both offset and typographic presses.

The Inkometer is first brought to temperature, and balanced while running with the rollers clean and dry by means of a trimming weight which corresponds to force w in Fig. 1-D. Measurement of consistency of an ink is then carried out by applying the measured volume of ink to the rollers by means of the special ink pipette I, running the Inkometer at the medium speed for one minute to secure uniform ink distribution, and then successively balancing the torque produced at the high, medium, and low speeds by means of the sliding weight W on the scale beam L. The scale readings are the values for tack of the ink at the three speeds, and are recorded.

Cleaning the Inkometer is a simple operation requiring less than two minutes. It is accomplished by applying a small amount of kerosene to the rollers and removing the softened ink first with absorbent paper and finally with a soft clean rag. Three applications of kerosene are usually sufficient.

The Inkometer test can be completed in five to six minutes, including cleaning of the rollers. For accurate results with a series of ink samples, the Inkometer is allowed to run without ink for about ten minutes between tests in order that any heat generated during the test and retained by the composition covering of rollers Y and V may be dissipated. Thus, tests can be run at about fifteen-minute intervals indefinitely.

The upper roller Y and distributing roller V are surfaced with Ideal composition. These rollers are good for at least two years and need be replaced only when they begin to soften. Softening is easily detected by checking the balance of the Inkometer with the rollers clean and dry. When the balance at the high and low speeds differs by more than two of the smallest graduations on the scale beam (0.4 gram-meter), the rollers should be replaced.

THE following table shows an actual example of Inkometer readings obtained from two different offset inks.

Ink No.	READINGS 600 *r.p.m.*	400 *r.p.m.*	200 *r.p.m.*
1	40.3	34.0	24.1
2	37.1	34.0	28.0

These readings are shown graphically in Fig. 4. The example is interesting because the tack readings of the two inks at the medium speed are identical, but are different at the high and low speeds. In Fig. 4 the curves for these inks have different slopes and indicate that Ink No. 1 was the longer of the two. Finger tests indicated that Ink No. 1 was the longer and Ink No. 2 the tackier, but the Inkometer tests showed that at moderate printing speed the tacks were the same, and at high speed Ink No. 1 was the tackier. It must be pointed out, however, that the finger test for length is sometimes quite unreliable, especially in the case of short inks, because the degree of "break-down" of inks is very much less than that which takes place in a thin film between rollers at printing speeds.

While the curves in Fig. 4 serve as records of length and tack, it is sometimes more convenient to express these values in numerical terms. Tack may logically be represented as the reading at the medium speed (400 r.p.m.) or at the speed nearest to the actual printing speed for which the ink is required. A corresponding value for length should be the slope of the curve corresponding to the selected value for tack. However, the average slope is sufficiently accurate for practical purposes and may be represented by the difference between the torques at the high and low speeds. Thus the numerical values for tack and length of Inks, No. 1 and 2 are as follows:

Ink No.	Tack	Length
1	34.0	40.3—24.1=16.2
2	34.0	37.1—28.0= 9.1

(Typical examples of Inkometer results are shown in Fig. 5 and 6.)

The primary purpose of the Inkometer is to enable the accurate measurement of ink consistency, or in other words, printing properties. At present there appears to be no other instrument suited to this purpose and capable of handling the plastic inks commonly used in letterpress and offset printing. The Inkometer should prove of inestimable value to the ink manufacturer in the standardization of printing consistency of his inks. Many letterpress inks are delivered to

the customer with the consistency at which they are to be printed. In the absence of stable consistency standards and of accurate methods of measuring consistency, however, much variation in printing quality occurs which must be adjusted in the pressroom, often with the help of a service man at the expense of the manufacturer. There are, of course, other factors which at times make adjustments necessary, such as variations in temperature and in the ink receptiveness of the paper, but these adjustments are greatly simplified and made more certain if the ink is properly standardized as to printing quality in the first place.

Lithographic inks are usually adjusted to their final consistency, and drier added, by the pressman. It might seem, therefore, that standardization of the original inks by the manufacturer is of little importance. This is not true because variations in the amounts of compounds and reducers required to produce a desired printing consistency also change color strength somewhat, and inks of standard consistency would greatly simplify the pressman's job. In production work formulas for adjustment of standardized inks could be depended on with much greater certainty than at present. And any simplification of the pressman's ink problems would mean greater efficiency and production, and better relations between the ink manufacturer and user.

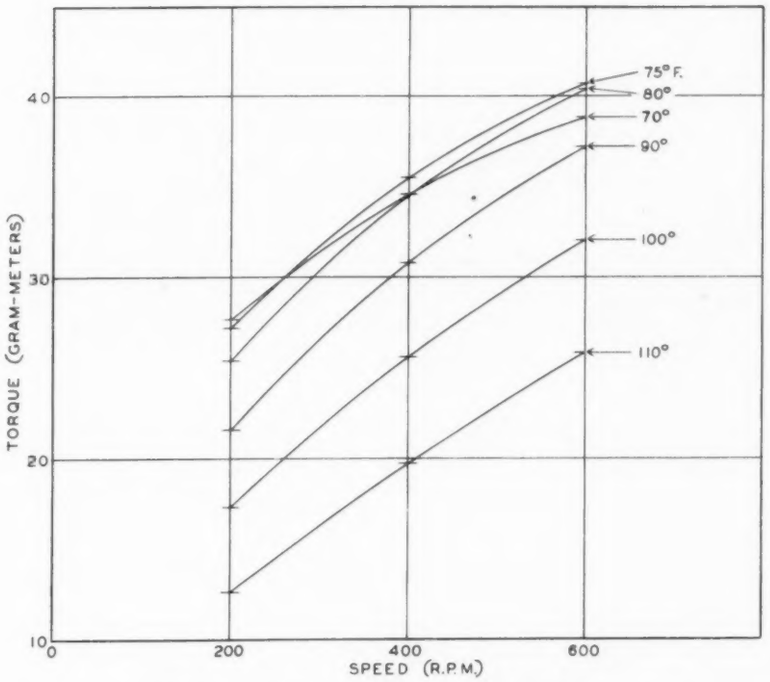


Fig. 5—Effect of Temperature on Ink Consistency.

Standardization of ink consistency is particularly important in the case of wet multi-color process printing, where inks must trap on each other in addition to being suited to the paper. The Inkometer will enable much needed research to be done on the proper adjustment of consistencies in sets of multicolor process inks. Preliminary data show large variations in the relative tacks of these inks in practice, a condition not generally realized and which probably results in failure to attain uniformly high quality.

Consistency, standardization, and control, are also important where soft, linty papers and coated papers are to be printed. The Inkometer indicates

(*Turn to page* 51)

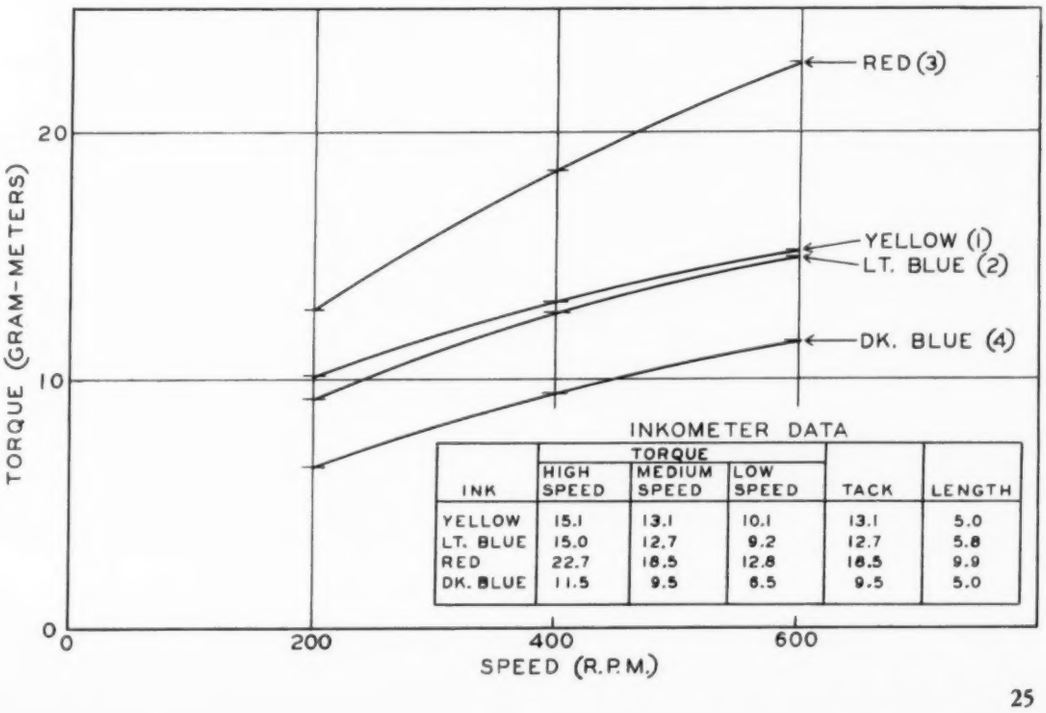


Fig. 6—Inkometer Consistencies of Typical Lithographic Inks Adjusted for Label Printing on C.I.S. Paper on a 4-Color Harris offset Press, in the Order, Yellow—Light Blue—Red — Dark Blue.

WHITHER DEEP-ETCH?

By Kenneth W. Martin*

A brief glance into the future, speculating on the possibilities and the applications of the deep-etch process that are immediately ahead.

For some years in the early thirties, deep-etch as a lithographic platemaking method was considered too difficult and involved for general use. The deep-etch method of platemaking was reserved for "quality work" or where an exceptionally long plate life was wanted. This idea has come in for a lot of over-hauling in more recent years. Deep-etch was truly a "Depression Baby" in the sense that a modern manipulation of an old idea made a very important contribution to the rapidly growing lithographic industry. If photo-lithography is a business—a point of view which is sometimes questioned—then the start of the Business Depression coincided almost exactly with the introduction of the modern deep-etch process. Today there are few lithographic establishments which do not use deep-etch occasionally. A high percentage use it regularly and a surprising number of important plants use it almost exclusively, the "almost" allowing for some hand-transferring.

The mechanics of deep-etch platemaking have been explained so thoroughly in many publications and talks that it seems unnecessary to offer any further explanation of the process. However, there does seem to be an almost universal misunderstanding concerning the time involved in making a deep-etch plate. People think of the deep-etch process as being a long process. Actually there are many instances where deep-etch acts to shorten the platemaking time. The U. S. Weather Bureau in Washington publishes a weather map which is printed on an offset press and rushed to the train every week day morning. The time elapsing between receiving *copy* in the platemaking department and sending the plate to the press cannot be more than twenty minutes! Of course, the copy is on transparent material and the coated plate is waiting to receive it, but twenty minutes is little enough time to make a fair-sized plate even under such conditions.

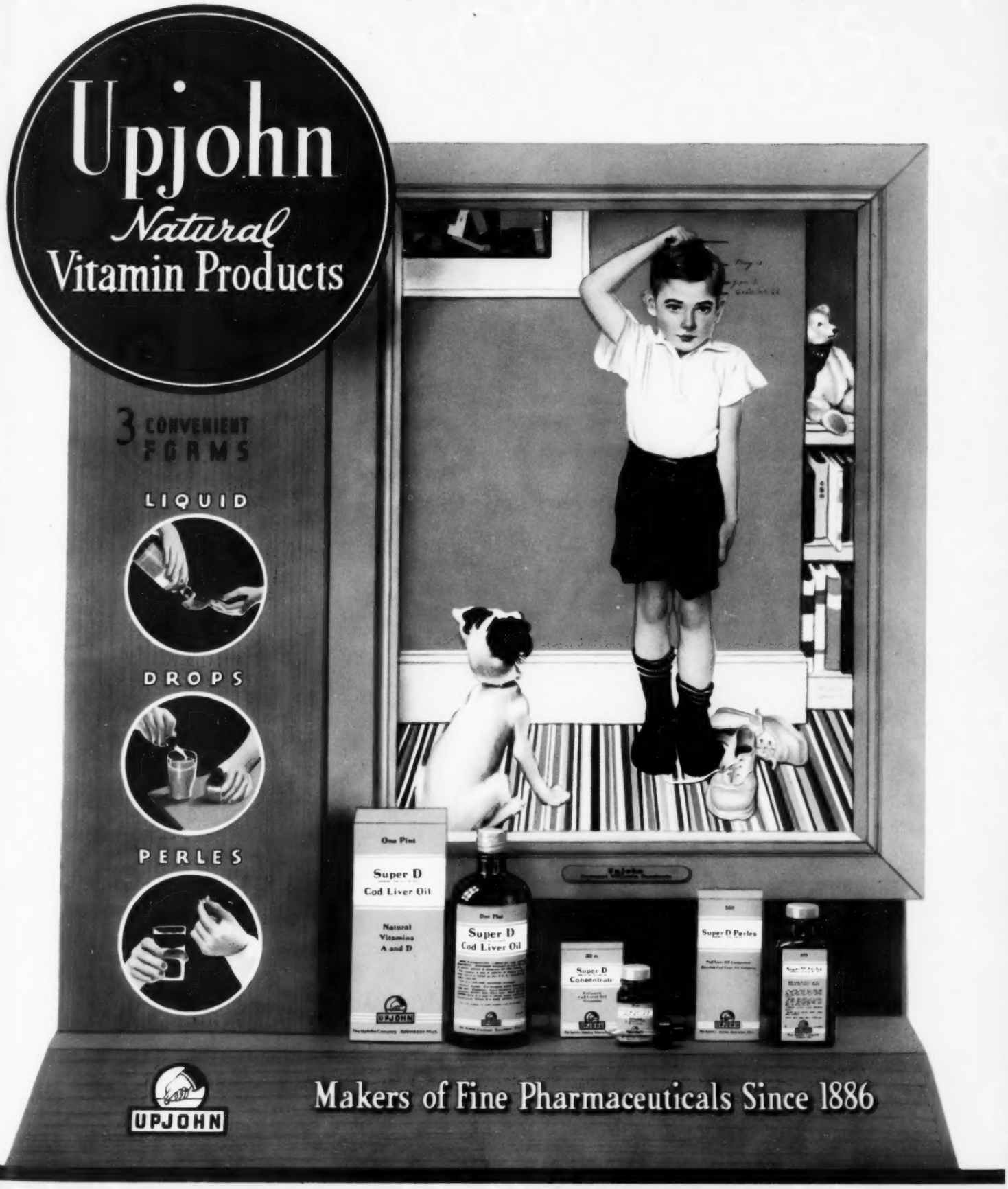
It is expected that the Hartford Newsdaily, the daily newspaper soon to be produced by web-offset, will take advantage of the possibilities of eliminating time-consuming negative making and opaquing operations. By pulling direct impressions on transparent material from the linotype composition and using these with stripped-in halftone positives, plates should be made ready for the press in a fraction of the time which would otherwise be required. It goes without saying that these plates will also stand up better under the rather severe conditions expected. It does seem reasonable to assume that if positives are clean and if the stripping is arranged so that cut lines are not difficult to stop out, the time required to make a deep-etch plate is not much greater than that required to make a plate by the albumin process.

If we may hazard a short glance into the future, it seems safe to predict that deep-etch will continue to serve lithography well. Figures indicate that the use of deep-etch is still increasing and increasing at a faster rate than the increase in volume of lithographing in general. The most fundamental changes in the lithographic process which seem likely to occur in the next few years should favor rather than hinder this trend. I would name these changes, in the order of their coming, as a swing to finer screens for both black-and-white and color; the use of monel, stainless steel, and similar "stainless" alloys in place of zinc and aluminum; and the use of bi-metallic plates where the printing areas are formed of metal, instead of light-hardened albumin or the greasy stains of deep-etch lacquer or ink.

Deep-etch is definitely better suited to the use of fine screens than are surface plates. The breaking up of the dot caused by grain interference is magnified when screens of 200-lines per inch or finer are run by the albumin process. With the deep-etch process, however, the sensitive coating is thick enough to cover the irregularities of the grain and the reproduction of the halftone positive on the metal is practically exact, dot for dot. Beautiful offset work is now being produced by deep-etch using the 200-line screen. This is particularly true in the greeting card field where colors must vignette off without showing sharp lines where work stops and uninked paper begins.

The use of stainless metals is also helped by the use of deep-etch. The

*Well-known speaker and authority on the chemistry of the offset process of the Harold M. Pitman Co.



An example of Keen Merchandising . . .
Created and Produced by FORBES

Creators Designers and Producers of

DISPLAYS
POSTERS
CAR CARDS
BASKETS
WRAPPERS

BUSINESS STATIONERY
PRINTED CELLULOSE
PACKAGE INSERTS
CALENDARS
ART PLATES

BOOKLETS
FOLDERS
FESTOONS
LABELS
CARTONS

Prescription for Successful Advertising

A powerful appeal to parental eyes and emotions has been instilled in this outstanding display by sound creative thinking . . .

Intelligent design and judicious color spotting incite shopper interest . . .

A minimum of copy presents a convincing story . . .

Faultless reproduction bespeaks quality of product and prestige of sponsor, fostering confidence in all the featured items.

In other words, this is a *positive* display that will stimulate *positive* buying action.

This same originality, thorough development and outstanding craftsmanship will be made an integral part of any of the items listed on this page if you will but avail yourself of Forbes' creative co-operation.

Join the imposing line-up of successful Forbes clients, NOW.

FORBES LITHOGRAPH CO.

THE SHOP BY THE SEA

P. O. BOX 513 • BOSTON

NEW YORK CHICAGO CLEVELAND ROCHESTER DETROIT

outstanding advantage of stainless steel and monel is that these metals have little tendency to grease up from ink acids. This permits the use of less water on the press than would be used with zinc or aluminum and a consequent increase in the brilliance of the print. In order to keep the water down, however, the metal should be used with a very fine grain; in fact European practice is to use no grain at all in the sense that we use the word "grain." The metal merely receives a sort of rough polishing. Since all albumin processes depend to a degree on the presence of a roughened surface to hold the dots and lines in place, it follows that ungrained stainless steel or monel would not offer a good foot-hold for albumin prints. The deep-etch dot or line, however, is not subject to such limitations as it lies slightly below the surface and is formed of a non-water sensitive lacquer. It is true that the etching solutions used with the deep-etch process on zinc and aluminum are not vigorous enough to etch the stainless metals properly, but there are etches available which will etch to a satisfactory depth without injuring the deep-etch coating.

THE development of bi-metallic plates for offset printing should be extremely interesting especially where long runs and absolutely dependable plates are needed. The most successful efforts along this line involve the use of copper for the printing dot and aluminum or stainless steel for the non-printing areas of the plate. The aluminum or steel plate is first plated with copper and then coated with light-sensitive material and exposed under a negative. After the print is developed, the copper is etched away from the areas which were protected by the blackened parts of the negative. This is essentially a deep-etching process although here the etched parts are used as the non-printing areas. There seems to be no question but that this method of plate-making offers great promise and we will certainly hear more of it as time goes on.

(*Turn to page* 51)

Offset Paper at Work

The first of a series on offset paper by Mr. Wheelwright, editor of "Paper & Printing Digest" and author of "From Paper Mill to Pressroom." He is a member of the Technical Association, Pulp and Paper Industry, and also of the American Institute of Graphic Arts of which he is an honorary vice president.

BY WILLIAM BOND WHEELWRIGHT

PAPER has a job to do after it is printed. If it is a hard job the sheet must be strong enough to take punishment. Loose leaf catalogs, price lists, etc., won't stand up to their work if printed on ordinary book paper. When illustrations are in order for tough-service jobs the advantage often lies with the offset printer. Halftone printing demands either a soft, heavily loaded book paper or a coated stock, neither of which are suitable for rough or repeated handling. A committee of the Library Association of Great Britain, which investigated the durability of paper in 1928, made a statement of great significance to lithographers; "The question is therefore one of the selection, for all but ephemeral work, of *methods of illustration* which will permit the use of good paper."

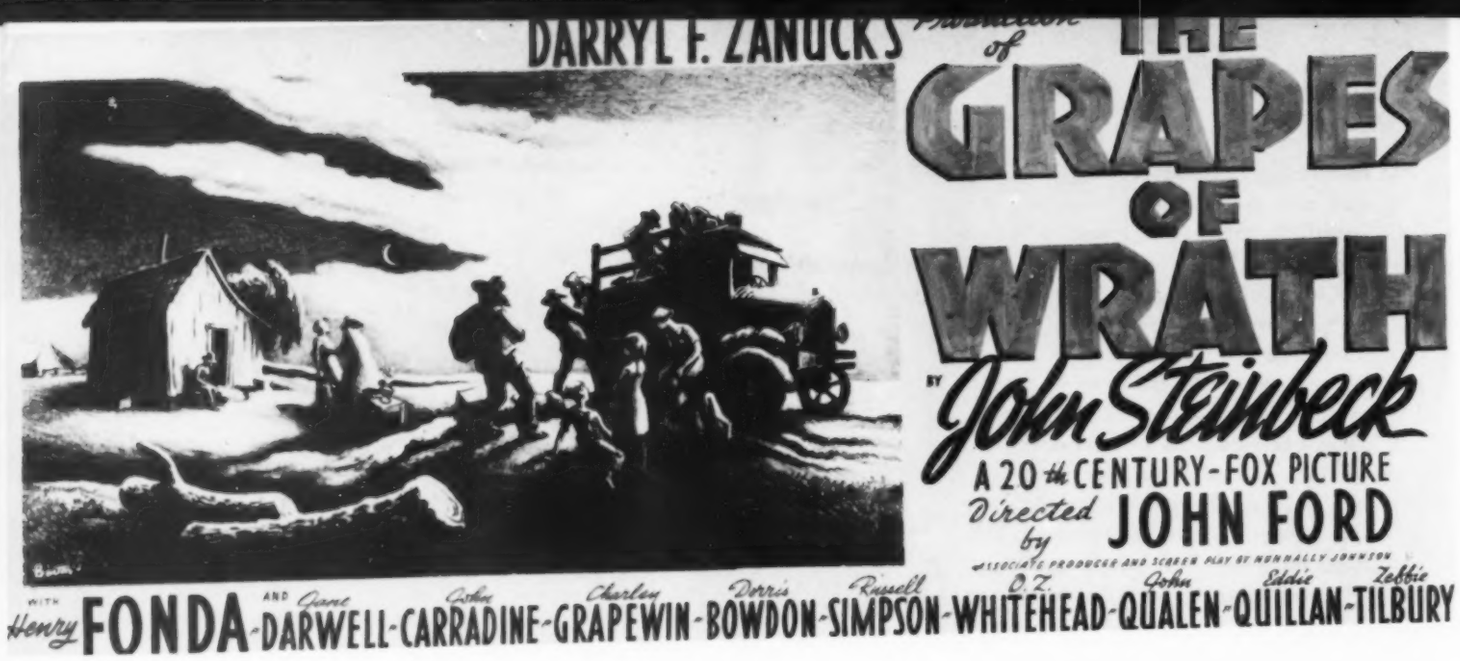
By "good paper," was meant of course, paper suitable for a given purpose. Smooth, soft papers favor letterpress printing, but have little durability. Nevertheless they may be "good paper" for certain purposes. Little is told about the folding strength of paper, but the number of folds a test strip will withstand before breaking is considered the best indication of durability. It is usual to test strips both directions of the grain. The folding strength is expressed in the average number of folds across and with the grain. The result depends upon the quality and length of the fiber, the per cent of filler and the way the pulp is beaten. In any given grade, strength will naturally be proportionate to the substance weight of the paper. In considering the functional properties of "paper at work," it behooves us to know something about the relative folding strength of typical papers.

Without going into an extended discussion of this subject, it is enlightening to consider a few examples. We had occasion to secure tests of an extra strong E.F. book paper basis 25x38-70. The tests were made in two different laboratories. The average of the two tests was 14 folds. This paper contained over 60 per cent sulphite and is far stronger than the average English finish book paper which, in substance 70 would be likely to show less than ten double folds.

When we compare this test with the specifications of the Government Printing Office for substance 20 sulphite bond (equal to 25x28-51), we find the folding test demands not less than 100 double folds. A No. 4 sulphite bond of same substance should allow about 40 double folds. Bear in mind that the equivalent weight of 25x38-70 book paper in 17x22 is substance 28.

Offset book paper is stronger also than most book papers used in letterpress, because it contains more sulphite pulp and less mineral filler. Consequently any illustrated job for hard duty which can be acceptably printed

(*Turn to page* 53)



THE JOAD FAMILY IS LITHOGRAPHED

THAT famous family of Okies, the Joads, heroes and heroines of the best-seller by John Steinbeck, "The Grapes of Wrath," has been lithographed for the movies. Thomas Hart Benton, celebrated American artist, last month delivered a set of six original lithographs of the Joad family—which included: Ma Joad, Tom, Rosashar'n, Pa, and Casey—to Twentieth Century-Fox to be used as advertisements for that company's production of "The Grapes of Wrath," opening at the Rivoli Theatre, New York, January 24. A lithograph showing the Joads packing for their memorable trek to California, reproduced on our cover this month and above, will be used in 24-sheet posters, while the characters shown on these pages will be used in 3-sheet posters, as well as in the film company's regular newspaper advertising. George C. Miller, New York, is the lithographer.

The commissioning of an artist of the standing of Thomas Benton, who is represented by works hung in the Metropolitan Museum, the Whitney Museum, the New School of Social Research and by many important murals, is a new departure in motion picture advertising.

Ma Joad

Tom Joad

Pa Joad

Rosashar'n

Casey

WE CHOSE LITHOGRAPHY

By Morris Marsh and Irving Sieser

(The artist's plight in the offset industry, as observed by Mr. Sieser, follows)

THE artist in the offset industry is looked on more often than not as a necessary evil rather than as an important unit. He represents in the minds of most in the average concern an annoying detour along the production route. He is outnumbered by a collective mind whose bent is alien to his—salesman, production staff, owner, etc.,—so that often simply by preponderence of opposite opinion short shrift is given many of his ideas. That has been my observation at any rate.

In art, whether it be fine or commercial, the artist is always left floundering in the midst of a number of schools of opposite thought. Perhaps schools of "prejudices" would be more apt, since I am convinced by experience that where art is concerned the average litho salesman, production man and, yes, even plant owner, are abysmally ignorant and lacking in an understanding of even the most rudimentary principles of what constitutes art. To this there is the reply: "True but trite. The gentlemen mentioned are not supposed to know about art. That is what artists are for." Then, I would like to know, why in the devil don't they admit it, and not pretend they know when they do not?

The average American businessman on matters of art is as glib as the members of a woman's Wednesday afternoon literary club. Show him a piece of art work and he will hold forth at great length on why this should be changed or that altered, summarizing it all with the weighty statement that: "I may not know all there is to know about art but I know what I like." Which is bathos. I have come to realize this fully when I present my sample folder to prospective employers. One of these samples, a menu cover, has provoked such widely different comments that I am at my wit's end and don't know whether to eliminate it from my folder or show it as one of my best samples. Yet all of my training and instinct tells me that it adheres as a design to basic layout principles, and its color combination is simple and harmonious.

"Everybody tells the artist how to do his job."

So it is with every idea conceived by the artist. No matter how good it is, no sooner does it materialize on paper than there are those who don't agree. Imagine then what it is like when these conflicting opinions all come from persons in a position to enforce their prejudices so that the resulting art work will conform to their individual tastes. What a fine mess this puts the artist in! He has no choice but to listen and abide by the opinions of everyone who is consulted, from all of the vice-presidents down to the man on the elevator. If he has the temerity to suggest that perhaps the man on the elevator might not be exactly the one to consult on such a question, your artist is put down as impractical, eccentric, erratic, temperamental and a dangerous fellow—"watch out for him— nice guy and all of that, but—well, you

LAST month one day two young men walked into the editorial offices of MODERN LITHOGRAPHY. They were looking for jobs, they said. One pulled out a folder of samples and showed his work, while the other talked. They had been working as artist and photographer in the offset industry for the past six years. Now they were out of a job. They weren't complaining. They just wanted advice. "Just bend people's ears," we said, "give 'em your story. Somebody's looking for fellows like you. You're bound to land sooner or later." They took us at our word and for the next half-hour bent our ears. They were articulate all right. They had a story. Some of it sounded good. They had done some keen observing in those six years. We liked the flavor of some of it. "Tell you what," we suggested, "you fellows have dished it out to us. Now we'll dish it out to our readers. They ought to go for some of this. O. K. by you?" It was O. K. by them, so here it is with their illustrations—Ed.

FOR CAREERS

Observations of two young men, one an artist and the other a photographer, who chose lithography for careers six years ago. What they have to say about their favorite industry six years later is interesting, particularly following the article last month on "Lithography As a Career" by Maurice Saunders.

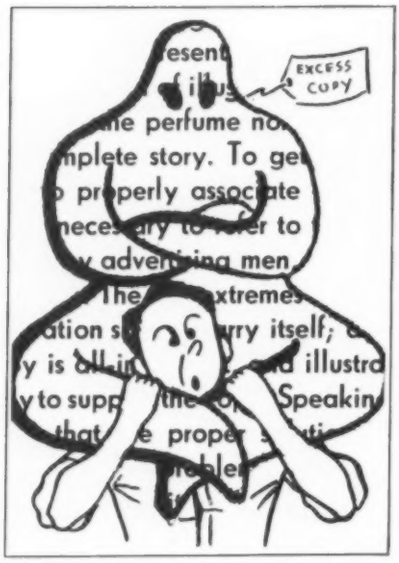
know;" and knowing looks are exchanged as much as to say: "He really ought to be kept behind locked doors, but we'll show our broadmindedness by indulging him."

All of the various persons who want to stick their fingers in the art pie do so with the notion that they are representing the customer's viewpoint, or because they feel that they are able to gauge the layman's digestibility of advertising. What results as a sketch is a concoction of the whims of all who had their fingers in the pudding. This is then turned over to a salesman who is prepared *not* to offer the customer any resistance where art work is concerned so long as he can bring in an order. The attitude toward the customer is to give him what he wants. This does not turn out at all times to be what he pays for.

Let me here describe the type of executive or account man who causes the artist no end of grief, and keeps him awake nights in a cold sweat. He is usually a man, who for a period of time, has nursed an account along with moderate success and now feels that the time has come to make it grow. So he comes to the artist for new ideas. In other words, he would like to promote a campaign, which basically is a sound idea. However, he does not realize that art is something with which he is not entirely familiar, and he stubbornly attempts to be the master of the situation. Results are disastrous in the way in which he goes to work on the sketches prepared for him. With pencil flicking like mad, he chokes and strangles by adding superfluous copy and unnecessary art work. He does not know that space is as vital to a layout as the air we breathe is to us. He feels that since his client is paying for space he can best impress him if he fills up every bit of it with enlightening facts about his, the client's, product. He changes the artist's colors, and substitutes others which he feels are more distinctive (what a multitude of sins that word *distinctive* covers!). He almost invariably hits upon red and green which insure a brutal effect if they have not already been provided for in the layout.

The butchered product is then returned to the artist, who has a choice between following instructions and

"The customer is king. The average salesman is afraid to disagree with him,—afraid of losing an order. Everyone gives him what he wants—or tries to—and this does not turn out at all times to be what he pays for."



"The average salesman wrecks the artist's idea by crowding it with his client's copy. He thinks that will make a hit. He doesn't seem to realize that white space is as vital to a layout as the air we breathe is to us."

hara-kiri. What results in printed form, regardless of the perfection of register, half-tones and such, is pretty terrible. These conditions are quite common and can generally be cited as some of the main causes for a great deal of low standard advertising.

THE problem then would be to remove these conditions which are so detrimental. However, the banishment of ignorance is no problem of small dimensions and can only be achieved through education. It is not a simple matter though to educate those who feel they know it all.

The next best thing is for the lithographer to employ a man who understands advertising from both the art and merchandising angles, and establish him as an executive with responsibility and administrative powers akin to that of the sales manager. He should be one capable of acting as a sort of a guiding beam for the artist. He could also act as go-between for artist and salesman as well as for artist and customer, for although it is the salesman's job to sell printing, he is not always equipped to sell art work.

Such an executive is as valuable to the firm as any piece of indispensable equipment. Today results in advertising are being achieved through the application of facts which are more and more tangible. It is no longer a vague business of hit and miss. Just as the chemist obtains his results because he is familiar with chemical reaction, so do we get results in advertising by understanding how people react. Only recently, a machine has been invented which determines exactly how much attention-getting value a specific piece of advertising copy has. We can now prove to the customer, who invariably has the urge to scream about how wonderful his product is, that he will get much better results if he will say it in a much quieter way with case histories to back it up; that it is no longer necessary to punch the man on the street in the nose to make him listen.

It is as much the lithographer's responsibility to sell the customer on these ideas as it is for him to see that a job is reproduced correctly. Of course, a customer will not order a re-run on a job if it wasn't done right the first time, but on the other hand he will give up advertising completely if it brings him no returns.

The lithographer should understand that the more efficient his art department, the more business will be turned his way. Even speculation will become an almost sure-fire way of netting some mighty profitable jobs. The secret in overcoming competition offered by other speculators called in on the job is not always the lowest estimate, but usually a good piece of art work from an advertising standpoint and a fair price to go with it.

When the artist is working on a job for speculation, he should not be rushed but should rather be allowed to take his time and turn out a job which represents his best efforts. The employer often does not see this point, for he feels that he must minimize the risk he is taking by cutting down

Mr. Sieser's conception of the artist after a hard day. The nightmare in bed with him looks peaceful enough, but Mr. Sieser says he (the nightmare) has tossed him out many a time.

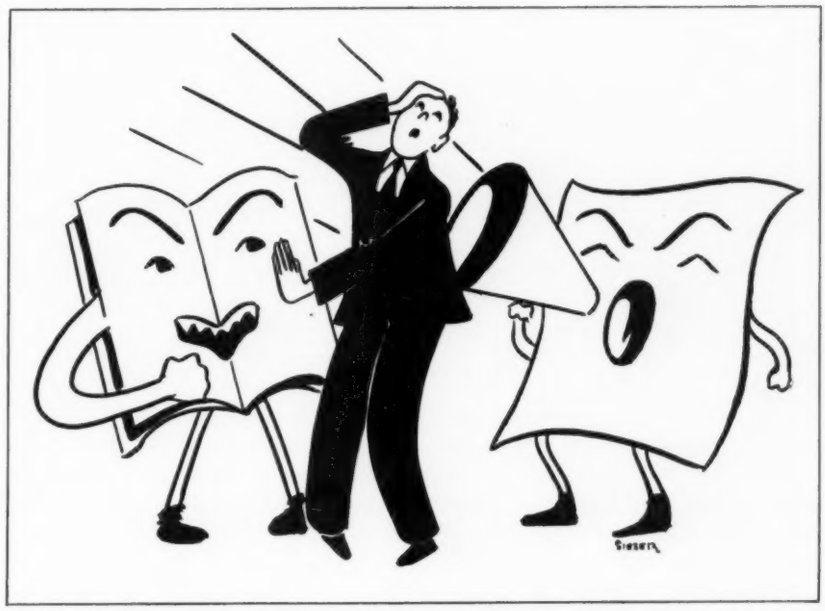
on time as much as possible. This is a haphazard way of speculating, for by minimizing the risk in this manner the chances of ever getting the job diminish proportionately.

If the lithographer could be persuaded to alter his department along the lines I have herein suggested, I feel quite sure that he will soon find he is more self-sufficient and can now meet the competition offered not only by other photo-offset houses but by the other processes as well.

(*The following observations are by Mr. Marsh*)

THERE used to be a sort of stigma attached to the fellow who was out of a job. He became an outcast. He was outside the realm of decent society. He was looked on with pity, perhaps; but with very little understanding. As he made the rounds looking for work, for the right to earn an honest dollar, he was eyed with suspicion. It just wasn't respectable to be out of work twenty years ago. The last ten years have changed all that. Today most of society realizes that it may not always be a man's fault because he doesn't have a steady job. It realizes, too, that a man, especially if he is young and hasn't his bearings yet, has a legitimate and perfectly respectable reason to shop around a bit in jobs, and pick up something here and something there in the way of experience which will help him come to some decision about the kind of work he is fitted for. So in most all industries, the average employer receives the job-seeker with consideration and in a spirit of helpfulness. Not so the lithographing industry. At least that has been my observation in the six years I have been a part of it.

It has always struck me as paradoxical that an industry, which has made such remarkable strides in improvement of methods, machinery and the quality of its finished product as the offset industry has, has made so little progress in employee relations. There is probably a good reason for it, but what it is I have as yet been unable to discover. Perhaps I just happened to hit certain plants, but it has been my experience that the young man who has been trained outside the plant by trade and vocational schools, as a photographer, or platemaker, or pressman, is not only made unwelcome when he applies for a job, but in a great many cases, is actually resented.



"It's up to the lithographer to tell his client that it's not necessary to shout in ad copy any more to get attention. If he will say it much quieter, with actual case histories to back it up, he'll get results."

A great part of the blame for this is due to the attitude of the applicant himself. He has read about the old-fashioned methods of some offset plants, which he assumes includes all, and presents himself as a "know-it-all" impatient to change things and usher in the "latest" methods. Naturally this attitude is death to his chances, especially if he is interviewed by a foreman who has been in the business for the past twenty-years, and has taught himself all he knows. But not all of the unwelcomeness with which a young craftsman is received (these observations, incidentally, are not entirely based on my own experiences, but on others with whom I have talked as well) are due to the brashness of youth. For my own part, I have always readily admitted my limitations and that I had much to learn. No, in my opinion, proper consideration is not given to the qualifications of the new and young employee looking for work in the shop because he is, usually, interviewed by the foreman or plant superintendent rather than by the employer himself, or a personnel manager.

Don't get me wrong: the foreman or superintendent should by all means help decide whether or not the applicant is fitted for the job, but his decision should not be the final and only one. The employer, or better still a personnel manager, since it is physically impossible for the employer in a large concern to interview personally each and every man he hires, should have something to say in the matter. I quite realize the union would have a hand in this, also. But, assuming that the new employee has been in the industry long enough to have become a member of the union, I think that a more progressive and more selective method, in cooperation with the union, should be worked out than exists at present whereby new employee applications are received and rated. This is a period of change in the offset industry. Change not only in machinery, but in men and management. What good are all the technological improvements in the world unless new blood and new brains are selected, with an eye to their fitness to apply these improvements?

Again, I must ask, don't get me

(*Turn to page* 51)

Stecher-Traung Strikes New Note of Simplicity in Label Design for Carmen Tomatoes

A SHARP departure from traditional and stereotype label design has been accomplished by Stecher-Traung Lithograph Corp., San Francisco, in a redesigning job it has just completed for Carmen brand tomatoes, packed by Schuckl & Co., also of San Francisco. The new design departs from the time-honored tradition, for tomato can labels, of attempting to copy the foreign label with all its intricacy and decoration. The new Carmen tomato label just produced by Stecher-Traung retains no feature of the old label except its color scheme and a suggestion of the Carmen figure in a small modernized head used as trade mark. Not only was the label modernized, but it was a step further in simplicity of design, color and lettering. Othello Michetti, who has been in charge of the San Francisco designing department of Stecher-Traung since 1921, believes that this is the first time a modernized design of this type has been used for tomato packages.

Two other new labels have also just been designed by Stecher-Traung which are provoking comment. They are for a popcorn product just placed on the market by Chas. Hefley Popcorn Products, Los Angeles. The labels are for gallon tins of the popcorn. A combination of color photography with hand art work has been used very effectively. The popcorn and the can are photographed, while the remainder of the design is hand work. The School Days brand label has a bright yellow background, the Colonel Crunch Brand a deep blue. Both are four-color photo offset productions.

Stecher-Traung, which is credited with doing about a third of the food labelling work on the Pacific Coast, has long been known for its pioneering in label design, with particular emphasis on simplification. Five years ago this firm, which up until that time employed hand painted designs, broke away from the custom of incorporating the whole fruit in a design. Instead, it made the radical departure of depicting fruits or other foods on dishes, or in some original way, appetizingly displayed. One of the first examples of this was its simple but striking design for Exquisite Peaches. Another was Bountiful whole apricots. Both show the fruits in glass dishes, in painted vignettes. In recent years, Stecher-Traung has modernized label designs for a long list of firms of national importance and has come to be regarded as leaders in the field. It developed the graphic fruit piece, or vignette, that has now become commonplace in modern labels, and contributed toward the development of natural color photography employing this style.

The trend in food labeling, according to Mr. Michetti, will be increasingly towards simplicity, away from trick designing. Color photography, with its emphasis on realism, has hastened the trend. "The entire character of the modern label design has changed," he said. "Now, we emphasize a balance of the brand name, the variety, the vignette, with particular attention to appetite appeal rather than originality or striking effects. The buyer desires legibility and quick appeal to the eye."

Stecher-Traung has plants at San Francisco and at Rochester, N. Y. In the San Francisco plant, the greater part of the work is label lithographing, while at the Rochester plant, serving the East and mid-West, both labeling and seed packets are produced. This latter plant is also a large producer of lithographed cartons.

The insert, opposite, is an example of some of the recent publicity and promotion which the Young Lithographers Association, of New York, is turning out in its behalf. Appropriately enough, the insert was prepared as a direct mail piece announcing a discussion-meeting on "Direct Mail Advertising and Lithography," held at the Advertising Club of New York, on January 10. Inside, as you will see by turning the page, the folder describes the purposes of the association. Incidentally, the response to this promotional piece was the best yet. Other Young Litho Associations might well copy.

•

Fluorescent lighting, the water cooled mercury vapor lamp and other modern types of illumination suitable for the lithographing plant were subjects of discussion at a meeting of the Chicago Lithographers Club, held last month at the Chicago Lighting Institute. The principal speaker was E. D. Tillson, lighting authority, with Commonwealth Edison Co., Chicago, who told of the growing use of fluorescent lighting and the special value of its daylight qualities for color matching. Carl Zersen, director of the Lighting Institute, outlined significant developments in production of light, and a third speaker, James Oberhausen, discussed adequate wiring.

•

The Associated Printers & Lithographers of St. Louis, through Gordon C. Hall, executive vice-president, are continuing their efforts for a reduction in the workmen's compensation insurance rate. An 8c reduction has already been allowed the printing industries, but Mr. Hall said the association will continue to work for an even lower rate and will gather loss and experience records for Missouri and other states for later submission.

•

Guy Bernardo, well-known color photographer associated with American Colortype Co., Chicago, talked on "New Color Horizons," at last month's luncheon meeting of the Direct Mail Advertising Club of Chicago.

YOUNG LITHOGRAPHERS ASSOCIATION

Mr. Lithographer

NEW YORK CITY

Our next meeting is important and interesting enough for you and your associates to attend; it will be held at the Advertising Club of New York, Wednesday, January 10th, at 6:30 P.M. The subject of the discussion will be "Direct Mail Advertising and Lithography". The speakers will be Mr. L. Rohe Walter, Advertising Manager of the Flintkote Company and President of the Direct Mail Advertising Association; Mr. Frederick Pinkerton, Sales Promotion Manager of U. S. Rubber Co.; and Mr. Lawrence Jacobson, Production Manager in charge of direct mail for R. L. Polk & Co.

Two years ago a group of twelve men started what is now known as the Young Lithographers' Association. Today over sixty members meet regularly at the Advertising Club of New York. The meetings have earned a reputation for the timeliness of the topics discussed, the calibre of guest speakers and the prevailing good fellowship.

The only thing young about the Association is the name - the age of the members varies from 25 to 60 years. Their occupations, within the offset field, include sales managers, foremen, estimators, salesmen, proprietors and production men.

By filling out and mailing the enclosed postcard you can reserve a dinner ticket for the above meeting only, at the special member's price of $1.50 instead of the usual guest's price of $2.00. If you care to, bring a fellow lithographer with you.

Cordially yours,

Alfred B. Rode, Jr.

President

A. B. Rode, Jr.,
Rode & Brand, Inc.,
200 William Street,
New York, N. Y.

Tel: Beekman 3-3840

Why AN ASSOCIATION?

The purposes of this Association are to provide a regular forum (1) for the consideration of particular problems under the guidance of appropriate experts, (2) for the interchange of industry information about production, management and sales, (3) to develop and strengthen the personal relationships between individual members of the industry, (4) to understand and consider from an industry standpoint the executive problems which must in time be faced by at least certain of its members, and (5) generally to maintain and promote the high standards of the lithographic industry.

How DOES IT FUNCTION?

The board of governors would welcome any criticism to our practice of meeting before dinner, enjoying an adequate meal with friends, hearing the viewpoints of outstanding speakers upon subjects pertinent to our industry, and then conducting an open discussion upon the evening's addresses.

How MUCH WILL IT COST ME?

Initiation fee, five dollars; yearly dues, two dollars and fifty cents. If you join right now, five dollars will entitle you to become a member until May first, 1940.

When AND *Where* DOES IT MEET?

At 6:30 p. m. on the second Wednesday of the month from September through May. All meetings held at the Advertising Club of New York, 23 Park Avenue, New York City.

Who CAN BE A MEMBER?

Anyone employed by lithographic establishments engaged in the manufacture and sale of lithographed products. Also anyone employed primarily in a non-selling capacity by companies which manufacture and sell supplies or services to the lithographic industry. The latter classification of members is firmly limited to 20% of the Association's total membership.

RADIO AND THE LITHOGRAPHIC INDUSTRY

How radio is, if anything, increasing the use of lithographed material was told by Robert A. Schmid, sales promotion manager of Mutual Broadcasting System, and Bryan Houston, merchandise executive of Young & Rubicam, at the May meeting of Young Lithographers' Association, New York.

Parts of Mr. Schmid's talk that are concerned with radio's encouragement of the use of lithographed tie-ins follow.

I make the point that the advertisers themselves did this tie-in advisedly. . .

You see, the broadcasters themselves, except in the case of coverage maps, and a rare give away to their own listening audien... plan or prepare broa... sponsors themse... Let's ... deci...

or another. Consid... this display of ... honored ... the

FEBRUARY 11, 1939

Experts Tell Jr. Lithos of Developments

Election of officers and annual business will feature the Mar. 1 meeting of the Young Lithographers Ass'n to be held at the Hotel Dryden. Still widely discussed is the forum on "Whither Are We Going in Letterpress, Lithography and Gravure?" which was continued at the February meeting. At that gathering seven outstanding authorities were heard from.

J. Thorner (Agfa-Ansco Corporation) led off with a discussion of films—starting in the dark room... offered some practical ... veloping. Willi... ner Labora... the advance ... field by offse... ments with ... newspaper — ... Times-Adverti... Robert Butler ... Manufacturing C... the change from ... semi-synthetic ink.

Young Lithos Report...

With an initialed modernistic version of Alois Senefelder's stone as the only decoration on the cover, the Young Lithographers' Assn. of New York issued a small black and white booklet containing the constitution, bylaws and officers' reports on the first anniversary of the organization. The booklet, incidentally, is ... ad-vertisement ...

The Only Weekly *Printing News* First With Th...

Young Lithos Hear Talks on War's Effects

The first meeting of the fall season of the Young Lithographers' Association was held ...

Young Lithographers' Ass'n Hold Graphic Arts Symposium

A symposium on the future of gravure, letterpress, and lithography was held February 1 at a dinner meeting at the Hotel Dryden, N. Y. C. under the sponsorship of the Young Lithographers' Association. The announced ... Carl Fisse (Interchemical ... oratories), Harry Port... bold Potter Co.), J. ... Ansco Corp.), Robe... Lang Mfg. Co.), ... (Huebner Labor...

BOOKBIND...

"The younger generation who are manning some of America's major lithographic plants, founded in several instances, by their great grandfathers, are seen in these sketches, drawn at New York City by the editor of ADVERTISER. Modern presses and supplies make their production and sales task lighter."

By The ... LITHO... EDIT...

Young Lithographers Hear World Fair Talks; Discuss Licensing

The Young Lithographers Association met at the Advertising Club, New York, Dec. 1, to hear a talk by Charles C. Green, director of promotion, the New York World's Fair, 1939. Mr. Green, a former president of the Advertising Club, described the progress of the Fair thus far, ... something of what it would ... pleted. The

The lithographer has the privilege and the Fair's permission to use material to produce letterheads, envelopes, pamphlets, booklets, folders, inserts, calendars, blotters, display cards, sample cards, and any other work not too definitely tied in with the promotion of a product to stimulate sales.

However, lithographers producing booklets, memo books, ... other material for ...

Young Lithographers to Hear Ullman

Young Lithographers' Ass'n, New York, will present Max... man, designer, as the speaker at its first meeting of the season S... 29 at the Advertising Club. ... McCandlish Lithograph Corp.'s motion picture, "The Mak... of a 24 Sheet Poster," and ... Packaging's sound and color m... "Over the Counter and Off the Shelf," will be shown.

YOUNG LITHOS VIEW FILMS

The movies went to the Young Lithographers' Association's first meeting of the fall season, September 29. The colorful film, "The Making of a 24 Sheet Poster" and "Modern ...

Tomorrow's Lithographic Leaders . . .

Y.L.A. of N. Y. Forms Alert, Able Group of Current Generation of Plant Ownership-Management Executives

On December 3, 1937, the rep... atives from more than twen... establishments of ... New Jer...

Authority was appointed counsel ... Association. The group elected permanent ... meeting in ... Kronenberg continues to act ... The other officers ... Britt Lithograph ... dent; Norman ... Sidney ...

and point-of-sale adv... meeting. In June ... pects to hold ... Young Pri... of New ...

Jr. Lithos Open Season

The first open dinner meeting of the 1938-39 season of the Young Lithographers' Association will take place at the Advertising Club, Park Avenue, on Sept. 29th, 19... 6:30 P. M.

The program includes ... picture, "The Making of ... Poster," produced by the ... Lithographing Corp. ... man, sales manager ... will accompany the ... questions, and a ... entitled "Over ... the Shelf," ill... packaging ... try store.

All Processes To Have Inning Before Lithogs

Letterpress, gravure and lithography will each have its inning at the Jan. 12 meeting of the Young Lithographers' Ass'n to be held in the Advertising Club.

Guest speakers will be Kent Rhodes of *Fortune*, Edward Schulz of Standard Brands and George Dernley of McCann-Erickson who will explain to the young lithos why, in each case, they buy letter press, lithography and gravure.

With the recent appearance as guest speakers of World's Fair officials, who explained the Fair Corporation's policies as to the purchase of printing and granting of licenses, the Ass'n, has completed its program aimed to acquaint members with the Fair as a source of lithography jobs.

The Young Lithographers Association, together with the Young Printing Executives Club of New York, held a joint ... at the ... October 27th

YOUNG LITHOGRAPHERS MEE...

TEN POINTS WORTH REMEMBERING

By HOWARD W. DICKINSON

1. Advertising within the memory of some of us has changed from the occasional use of a sales tool for immediate or emergency needs ...

2. Over a fairly short ...

Young Lithographers Hear Good and Bad About Color Photography

An overflowing crowd of about a hundred representatives from local lithographic plants attended the April meeting of the Young Lithographers Association at the Advertising Club on April 14th. They heard the subject of color photography discussed frankly by three speakers representing three different viewpoints.

Mr. Gordon Aymar, Art Director for the Compton Advertising Agency of New York, lined up the reasons for choosing paintings or color photography for particular jobs. He stated that the reasons expressed were in the nature of a cooperative opinion resulting from the composite views of himself as Art Director, of the production man, the copy man, and the other ...

of color photography briefly. For still life, he said that he would use four or more color separations because the object was stationary, and that except for any movement of the camera, it was possible to get perfect register. For moving objects, Mr. Bruehl uses the one shot Devon camera shooting all three plates at once. After that, he spoke about carbro prints, wash-offs, transparencies and chromotones each of them. In conclusion, Mr. Bruehl shocked the audience by stating that for the first time he realized that the lithographic process could reproduce faithfully and beautifully. He added that by looking over the samples on exhibit he had seen some ... for the first time in ...

NEW YORK YOUNG LITHOGRAPHERS OPEN WITH NICE PROGRAM—

A Typical Meeting of the Eastern Group.

The first meeting of the 1938-39 season of the YOUNG LITHOGRAPHERS' ASSOCIATION will take place at the Advertising Club, 23 Park Avenue, on September 29th, 1938 at 6:30 P. M. This meeting will be an open dinner meeting, and all members are requested to urge their friends in the industry to accompany them.

The program consisting of two moving pictures and a speaker will be as follows:

A moving picture entitled, "THE MAKING OF A 24 SHEET POSTER," produced by the McCandish Lithographing Corp. This shows the creation ... sheet poster from the moment it is created ... to the time it is placed on the out... panels. Mr. H. A. Speckman, ... will accompany the ...

PRINT BUYERS COMPARE PROCESSES

In line with its policy of encouraging free expression of opinion as to the various processes of reproduction, the Young Lithographers' Ass'n, at its last meeting called upon important buyers of printing to discuss letterpress, lithography and gravure. Brief excerpts from the discussion are presented below.

By EDWARD SCHULTZ,
Purchasing Agent, Standard Brands, Inc.

"We classify gravure with the special processes, which apply to certain specialty jobs involving very short runs or very long ones where economy is necessary or advisable. This process at best suffers in quality comparison with letterpress or lithography due to poor type register and page margins, but fits where economy is necessary. It offers certain advantages in pictorial effects ...

By GEORGE DERNLEY,
Production Manager, McCann-Erickson, Inc.

"As an advertising agency ... with investing the cash ... our have to be ... our orders are ... a fairly ...

By KENT RHODES,
Production Manager, Fortune Magazine

"Each process has its own peculiar merits and no one process is superior to all others. The production department of a publication is given the copy and must do the best they can with it. Under such circumstances, it makes sense to see if another printing process could do a better job with the copy—if you can't fit the copy to the printing process, the logical alternative is to fit the printing process ...

... of more than one print... a single issue of a pub... seem to be an expensive ...

Radio Tie-Ins Discussed at Young Litho Meeting

Lithography used in connection with radio advertising ... products ... at the May meeting of the Young Lithographers Ass'n. ... Broadcasting System ...

YOUNG LITHOGRAPHERS HEAR EXPERTS

The question "Whither Are We Going in Letterpress, Lithography and Gravure?" was ably answered at the February meeting of the Young Lithographers' Association by seven outstanding authorities in their ... fields.

with the improvement of the industry in general. Gloss Offset Ink, in particular, was one of the developments ...

... Butler spoke about ... Mr. Summerfield Eney of the Champion Paper and Fibre Company, outlined the advances in paper production ... mentioned briefly, the new surfaced one operation coated ... problem of humidity control ... experiences with three and ... process jobs. Samples ... around to demonstrate ... qualities. ... MacArthur of the Rey... company handled the ... all three processes ... the advances ...

made, citing the im... foresaw even gre... but cautioned ag... based on inco...

Mr. Carl F... Research ... great thin... Some of ...

LETTERPRESS AND OFFSET IN BATTLE OF WORDS

For the first time in the history of the Graphic Arts, letterpress and lithography joined in a combined meeting to enjoy a rousing battle of words on the subject of Advertising, a topic of vital interest to both groups.

The Young Lithographers' Association and the Young Printing Executives Club met at the Advertising Club on October 27, to listen to Mr. Dexter Masters of the Consumers' Union and Mr. Howard W. Dickinson of the AAAA. No punches were pulled. Masters deplored the part advertising played in publicizing and helping the sale of harmful or negative products. He quoted names, cited statistics and minced no words in his position clear.

Dickinson then battened down the hatches. He read an essay especially for the occasion, defending advertising and its value. No angle was left important economic tool ... depended on. His ten points ...

NEW SLIDE COM... pH. DETER...

The Only Weekly *Printing News* First

It Was Free Speech Night At Joint Session of Juniors

For the first time in the history of the graphic arts, according to an announcement by the Young ... Lithographers' Ass'n, letterpress and ...

lithography joined in a combined meeting Oct. 27 to enjoy a rousing battle of words on advertising.

Present were many members of both the Young Lithos and the Young Printing Executives to listen ... Dexter Masters of Consumers' ... W. Dickinson of ...

Consumer Movement Discussed by Speakers at Joint Meeting

The consumer movement in the United States and its relation to advertising was discussed at a joint meeting of the Young Lithographers' Ass'n and the Young Printing Executives Club, held at the Advertising Club, October 27. ...

COLOR PHOTOGRAPH VS. PAINTING

The Young Lithographers Association, New York, enjoyed an unusually stimulating April meeting, because of talks on the subject of color photography versus painting, given by three experts—Gordon Aymar, Art Director of Compton Advertising, Inc., New York; Anton Bruehl, famous photographer of New York; and W. N. Misuraca, Director of Lithography, National Can Corporation, New York.

The talks by Messrs. Aymar and Bruehl follow. Because of space limitations, Mr. Misuraca's talk will appear in the June issue.

Experts Aymar and Bruehl Rival Candid Camera in Presenting Candid Word Pictures of Situations on Two Sides of an Important Subject

•

few of the reasons why we use color photography, which you probably all know; and a few of the reasons why we use paintings, which you may have forgotten.

While I don't think that there is any particular rush to buy paintings, certainly if you sit down and figure ...

There is another factor that enters here for small snapshots. You have the basic price limitation on color photographs. You don't have that handicap with still life paintings.

Another reason for using the artist rather than the photographer would be the vogue for caricature. See the volume of comic strips. That's one of the most interesting phases that's come over advertising, and one of the advantages is that it can be so condensed. You can get material in a comic strip that you used to spread over a full page in newspapers. Color photography is not exactly suited for ...

February, 15...

Ask one of these members to tell you about

THE YOUNG LITHOGRAPHERS' ASSOCIATION

1. Norman C. Bernhardt	Sweeney Lithograph Co. Inc., Belleville, N. J.	Rector 2-4840
2. Robert R. Heywood, Jr.	R. R. Heywood Co., 263 - 9th Ave., New York City	Chickering 4-3664
3. William Misuraca	National Can Corp., 110 E. 42d St., New York City	Ashland 4-1000
4. Charles F. Roberts	Brett Lithographing Co., 47-07 Pearson Pl., L. I. City, N. Y.	Ironsides 6-9020
5. Alfred B. Rode, Jr.	Rode & Brand, 200 William Street, N. Y. City	Beekman 3-3840
6. George J. Rufenacht	U. S. Printing & Lithograph Co., 85 No. 3rd St., Brooklyn, N. Y.	Evergreen 8-4400
7. George Schlegel, 3rd	Schlegel Lithographing Corp., 2nd Ave. & 22nd St., N. Y. City	Algonquin 4-9226
8. H. Monroe Selling	Zeese-Wilkinson Co. Inc., 27-42 Thompson Ave., Long Island City, N. Y.	Stillwell 4-8620
9. Alfred Soman, Jr.	National Process Co. Inc. 75 Varick St., New York City	Canal 6-0366
10. Wesley C. Steele	Jersey City Printing Co., 160 Maple St., Jersey City, N. J.	Delaware 3-6900
11. James C. Strobridge	Strobridge Lithographing Co., 250 Park Ave., New York City	Wickersham 2-9567
12. Sidney P. Voice	Consolidated Lithographing Corp., 1013 Grand St., Brooklyn, N. Y.	Evergreen 8-6700

IN AND ABOUT THE TRADE

Adams Printing Expands

Adams Printing Co., Memphis, Tenn., has added a new Harris offset press, a new Vandercook Proof Press and several small bindery machines. It has taken an adjoining building at 347-9 Madison Street in Memphis for its printing and lithographing equipment. W. H. Adams is president and F. C. Adams, sales manager.

•

Marquette to Add New Press

Marquette Lithographing Co., Chicago, will add a new Harris 41 x 54 offset press to its present facilities in March, according to company officials. Two similar highspeed streamlined Harris presses were installed in 1939. Marquette's volume sales last year represented a 30 per cent increase over 1938, according to Claude Powell, president. Over 50,000,000 greeting cards of twenty different types were sold in 1939, representing a 20 per cent increase over the previous year, he said. The company does all types of lithographed work except outdoor posters.

•

Associates Honor Devine

John F. Devine, General Printing Ink Corp., New York, was honored by his friends and associates with a dinner at the Hotel Pennsylvania last month, in celebration of his twenty-fifth year with G.P.I. He was presented with a gold watch and an onyx desk set as remembrances.

•

Edward L. Jackson Dies

Edward L. Jackson, superintendent of Michigan Lithographing Co., Grand Rapids, Mich., for the past twenty-five years, died last month. Mr. Jackson was well known to the printing and lithographing industry throughout the Chicago district and also on the west coast.

•

Milwaukee Assn. Names Krueger

William A. Krueger, Jr., W. A. Krueger Co., Milwaukee, was elected president of the Milwaukee Association of Photo-Lithographers at their regular meeting last month. Roger F. Owsley, R. & L. Litho Corp., was

W. A. KRUEGER, JR.
. . . elected president.

elected vice-president and L. O. Weiss, secretary-treasurer.

•

Joins Litho Chemical

George L. Thompson, formerly with Lever Bros., soap manufacturers, has joined Litho Chemical & Supply Co., New York, as export manager. Litho Chemical is marketing its supply products in 29 countries abroad and in the British Dominions and South Africa. Mr. Thompson will be in charge of the company's newly organized export department to handle that work.

•

Boday to Give Course

Jules Boday, McCann Erickson, New York, well-known lecturer on the graphic arts, announces a non-technical practical course in direct advertising and its mechanical production beginning January 15th and running through March 25th. The course covers every-day problems in all phases of direct advertising and its production. Mr. Boday's course will be illustrated by movies and demonstration kits. Class notes will be given to each student at the end of each session for his permanent file. Sessions are scheduled for every Monday evening from 7 to 8:30 P.M. with visits to various reproduction plants on Fridays. It will be given at the Advertising Club of New York. The cost for the complete course is $15.00.

•

Cincy Craftsmen Reelect Sooy

Walter Sooy, of Gardner-Richardson Co., of Lockland and Middletown, Ohio, was reelected president of the Cincinnati Club of Printing House Craftsmen at the annual election held last month. Irwin Goller, of Richardson-Taylor-Globe Corp., Cincinnati, was reelected vice-president; John M. Callahan, International President and official of the United States Printing & Lithographing Company, Cincinnati, was reelected treasurer.

Charles Pigman, of Gardner-Richardson Co. and August Bruder, of Western Paper Goods Company, Cincinnati, were among those elected to the board. New members added include Benjamin Klein, Jr., and Sidney E. Miller, both of Nivison-Weiskopf Co., Reading, O.; Jack W. Heinlein, Graphic Arts Engraving Co., and Richard Tullis, Miller Printing Machinery Co., both of Cincinnati.

•

Holds Sales Conference

Rapid Roller Co., Chicago, held its annual sales conference under the direction of V. P. Nilles, sales manager, last month. All territories covered by Rapid Roller were represented at the meeting and reported that prospects in the graphic arts industries during 1940 were unusually promising.

•

Bird to Ideal

Sid Bird, formerly with Printing Machinery Co., Chicago, has joined the sales staff of Ideal Roller Manufacturing Co., also of Chicago.

LMNA Issues New Provisions

Labeling provisions under the new Food, Drug and Cosmetic Act, the effective date of which has been postponed until July 1, 1940, are described in a bulletin released last month by the Label Manufacturers Association, New York. Final regulations, modified somewhat since they were first proposed November 15, provide that labeling prepared prior to February 1, 1939 may not be used if the quantity on hand January 1, 1940 is less than 10 per cent of the quantity used in the year 1939. An inventory must be taken of the labels on hand January 1, 1940 and this record, together with the records of such labels used in 1939, must be available until January 1, 1941 for examination by the Food and Drug Administration.

•

Award Local I.P.I. Winners

Local winners in the fourth annual I.P.I. essay contest, sponsored in cooperation with the National Graphic Arts Education Guild, were given special magnifying pencils as prizes last month in connection with the Printing Education Week ceremonies at the various schools where drawing is taught. National winners will be announced shortly by the jury headed by Harry Gage, Mergenthaler Linotype Co., Brooklyn. Frederic W. Goudy, noted typographer, and Glen U. Cleeton, head of the Department of Printing, Carnegie Tech, Pittsburgh, have been added to the list of members of the contest advisory committee.

•

Schaff Names 1940 Objectives

Urging a better understanding of the litho industry's problems in 1940 and a clearer recognition of the efforts now being made to solve them, Merle S. Schaff, of Dando-Schaff Printing and Publishing Co., Philadelphia, and president of the National Association of Photo-Lithographers, New York, in a New Year's message called attention to three contributions which the N.A.P.L. was making toward that end. Mr. Schaff said:

"There are three association objectives to be reached in 1940. By accomplishing these, and through the continued cooperation and support of our members, we hope to make this New Year the year of industry progress and success we all wish it to be. They are:

MERLE S. SCHAFF

"*First*, the publication of up-to-date economic hourly costs, based on actual experience and time studies in a group of representative modern lithographic plants.

"*Second*, the development of a simplified, easily applied cost system, so that every member plant, large or small, may check its own costs with the industry experience in every operation.

"*Third*, the publication of a modern sales training program for photo-lithography, so that each of the thousands of claims made daily about lithography by its salesmen, may be a constructive claim for the industry."

•

Coxhead Exhibits Varityper

Ralph C. Coxhead Corp., New York, is exhibiting for demonstration purposes the latest model of its Varityper, the composing typewriter with changeable faces and spaces, at the Roger Smith Gallery, New York, during January. On view also are a variety of samples of products set up by the Varityper and lithographed.

•

Explains Govt. Contracts

The National Association of Manufacturers, New York, has just published an analysis of the principles and procedures relating to contracts between government and private business in the combined November-December issue of its Law Digest. This is believed to be the first complete study devoted to the legal and practical problems facing all manufacturers doing business either directly or indirectly with Federal governmental agencies. Desirability of a comprehensive treatment of this subject followed a growing number of inquiries from the Association's members, due to the increasing importance of the government as a purchaser of goods needed for national defense, and due to the determined effort on the part of labor organizations and some demon-

Ralph C. Coxhead Corp., New York, is exhibiting the latest model of the Varityper at the Roger Smith Gallery, New York.

strative agencies for the extension of the Walsh-Healey Government Contracts Act where the amount involved is less than the present $10,000 limitation.

Pointing out that the combined agencies of the Federal Government today represent the largest purchasing agent in the American market, the analysis shows the necessity for understanding Federal requirements in the matter of contracts, and outlines briefly the administrative procedure for entering into government supply contracts, and the principal legal requirements and the consequences of the contractual relationship established.

The topics treated by the N.A.M. publication include: 1. General principles and procedures of entering into government contracts; 2. Standard contract forms and typical provisions; 3. Laws which may be part of contracts; 4. Procedure for payment; 5. Disputes and appeals; 6. War-time contracts.

•

Agfa Distributes Bonus

Agfa Ansco Corp., Binghamton, N. Y., distributed a Christmas bonus of $145,000 among the company's 2700 employees last month. Last year, Agfa employees received a Christmas bonus amounting to $125,000. Dr. Ernst Schwarz, president of Agfa, announced that every employee who joined the company prior to July 1, 1939, shared in the distribution. The amount depended upon length of service.

•

Canners Meet Jan. 21-26

The convention theme of the annual meeting of the National Canners Association, being held at the Hotel Stevens, Chicago, Jan. 21-26, is Distribution. Always of interest to creative lithographers, the convention this year is particularly so since it will emphasize the need for better merchandising methods and the importance of closer supervision of sales and promotion on the part of the canner. The program provides for a wide range of discussion, including such subjects as: marketing and merchandising channels; consumer and distributive trade education; food and drug regulations, including standards and labeling; and education. Readers will recall the talk, "Prying Open the Canned Foods Market," given at the Lithographers National Association convention last June by Nelson Budd, editor of *Canning Age*, and published in the July issue of MODERN LITHOGRAPHY, as predicting that the canned foods industry would eventually assume more direct supervision of merchandising, sales and distribution. The theme of this year's annual meeting would seem to bear out that prediction.

Photograph of a liquor warehouse showing piles of unused and discarded lithographed displays. The photo was shown by K. H. Seidel, advertising manager of Oldetyme Distillers, Inc., at a recent meeting of the Young Lithographers Association in New York. Mr. Seidel said that the condition represented above had been one of his company's biggest problems, since, he said, over 40 per cent of all displays purchased "ended up this way because there was no inspiration behind the planning and designing of the display." Mr. Seidel was one of three speakers who addressed the Young Lithographers on "Lithography and the Liquor Industry."

St. Louis Honors Veteran Lithos

Woodward & Tiernan Printing Co., St. Louis, was represented by 18 veteran employees and Buxton & Skinner Printing and Stationery Co. also of St. Louis, by 13 veteran employes at a testimonial dinner given last month by the Chamber of Commerce of St. Louis, to pay tribute to 968 men and women who had served concerns of that city 40 years or more.

William H. Jones, Sr., with a record of 61 years' service, was top man for Woodward & Tiernan. Others from this firm who were honored were John

Alt, Rudolph A. Boelling, William T. Boehler, Henry Bove, Edward S. Daly, Otto A. Hoffmann, John W. Holden, Daniel J. Kerwin, president of the company, Norris Nicholson, Frank J. Minges, R. W. Morris, Henry O. Moser, D. J. O'Connell, T. J. Quigley, Frank H. Tranel, Charles C. Robertson, Harry P. Walter.

John P. Rehme's 53 years topped the Buxton & Skinner list, with the delegation including Stephen L. Boedeker, John Buscher, Otto G. Courtial, Fred H. Jones, W. Harry Nangle, Emil Markert, George F. Tatum, John Ziegler, Edwin G. Schauenberg, E. LeMoine Skinner, Jesse S. Skinner and George W. Smith.

•

Lead Reserve Bowlers

Rosers Rockets, an inter-plant bowling team of Reserve Lithograph and Printing Co., Cleveland, is leading the way at the halfway mark in a hard-fought tournament sponsored by the Cleveland litho plant. There are six teams participating in the tournament, each backed by a non-bowling official of the company. J. L. Roser, superintendent of the Reserve plant, is the sponsor for the winning Roser Rockets. The other teams in the order of their present standings are: Stacey Stars, DeMuths' Demons, Whites Wildcats, Calverts Cadets, and Falls Falcons. Reserve's house magazine, *Litho - Print*, a lithographed publication, reports that the annual bowling tournaments have become "the finest and most helpful harmony builder our company has ever experienced."

•

Future Bright, Says Wadewitz

Characterizing lithographers as members of an industry "that still affords untold opportunities," E. H. Wadewitz, of Western Printing & Lithograph Co., Racine, Wis., and president of the Lithographers National Association, New York, told members of that association in an annual New Year's message that they could look forward with complete confidence and assurance in 1940. Said Mr. Wadewitz in his message:

"The year 1940 finds our industry in a healthy condition, going strong and alive to the even greater opportunities for growth and expansion which lie ahead. Because of the fact that lithographers are members of an industry that still affords untold opportunities for the creation of new ideas, the development of new processes and the promotion of new markets, we can look forward with complete confidence and assurance. This forward march has made itself evident with each passing year and 1940 should be no exception. Faith, courage and continued hard work are bound to bring to each and all of us a full measure of progress."

E. H. WADEWITZ

St. Louis Club Hears Gonda

Francis D. Gonda, vice-president of Einson-Freeman Co., of Long Island City, New York, spoke before the St. Louis Advertising Club at the Statler Hotel, St. Louis, last month. His address, "Putting on a Better Show in the Show Window," illustrated how the technique of Hollywood and the stage are effectively employed in window display. Outstanding lithographic work was included in his demonstration materials.

•

Cincy Craftsmen See Movie

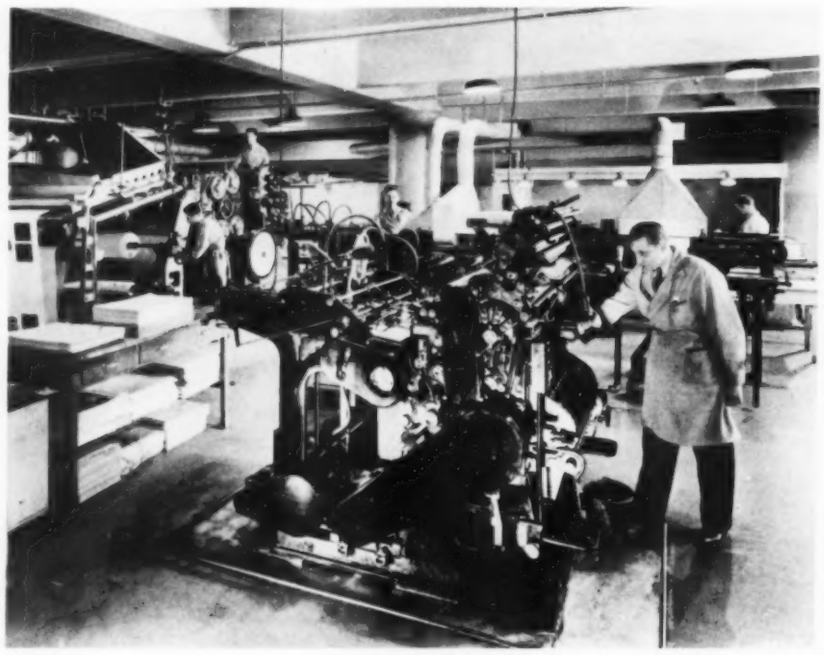
"Keeping in Touch," International Printing Ink's motion picture in color and sound, was shown, among other places, at the annual meeting of the Cincinnati Club of Printing House Craftsmen, held in Cincinnati, last month.

•

Offers New Reprints of Article

The Lithographers' National Association, New York, has reprinted "From Stones to Rubber Blankets," an article which first appeared in December 1936 in *Oil Power*, Socony Vacuum house organ. Included is a list of lithographed media.

Scene from International Printing Ink's color movie, "Keeping in Touch," showing the offset press on which inks for lithographic work are tested.



Separation negative on 30 x 40-inch Wratten C. T. C. Panchromatic Plate.

For Finest *Color Work* Depend on EASTMAN PLATES

LARGE and small—30 x 40 to 5 x 7—there are Eastman Plates specially designed for every type of full-color reproduction. Select those best suited to your needs, with full confidence in their typical Eastman quality and complete dependability.

Wratten Contrast Thin Coated (C.T.C.) *Panchromatic Plates* for direct-halftone separation negatives. *Wratten Tricolor Panchromatic Plates* and *Wratten Panchromatic Plates* for continuous-tone separation negatives. (*Wratten Tricolor Plates* are less contrasty than Wratten Panchromatic.) *Eastman 33 Plates* for continuous-tone positives.

Eastman Infra-Red Sensitive Plates for continuous-tone, and *Eastman Infra-Red Process Plates* for direct-halftone, black-printer negatives for process color work.

For black-and-white negatives of extreme contrast and exact size, we recommend *Kodalith Orthochromatic Plates* and *Eastman Contrast Process Plates.*

Test-Exposure Plates

Two 5″ x 7″ test-exposure plates are included without charge in each package of plates 18″ x 22″ and larger. This service permits lighting, exposure, and other important factors to be predetermined with extreme accuracy, reserving the large-size plates strictly for production.

On 3/16-inch glass

Sizes 26 x 34 to 30 x 40 are supplied on 3/16-inch glass. On special order, sizes 16 x 20 to 24 x 31 also will be furnished on 3/16-inch glass without additional cost. There is a slight extra charge for sizes 8 x 10 to 14 x 17 on 3/16-inch glass.

Order Eastman Plates and other supplies from your Graphic Arts dealer.

EASTMAN KODAK COMPANY Graphic Arts Dept. Rochester, N.Y.

So It Was Good-Bye Trouble

ONE thing about this generation of lithographers,—they're right up to the minute on modern production equipment. They're chips off the old block and know exactly what to do about chips off the old rollers: get new ROBERTS & PORTER LEATHER and INTERMEDIATE ROLLERS.

A lithographer wrote us recently as follows: "I thought my experience would be interesting . . . since it must be typical. A short time ago I got some rush work. Customer was in quite a dither. Assured me if we could make deliveries on this there would be more work coming. As luck would have it, our distribution rollers began giving us trouble. They began to chip and the composition to peel off. I had been thinking for some time of getting all leather distribution rollers. Well, to make a long story short, we had all of our distributors recovered with smooth leather and since then good-bye to trouble."

This lithographer's experience was typical. We have no end of similar testimonial letters from lithographers, and they all agree on this point: ROBERTS & PORTER LEATHER DISTRIBUTION and INTERMEDIATE ROLLERS mean good-bye to trouble and upkeep.

ROBERTS & PORTER, Inc.

402 SOUTH MARKET ST.
CHICAGO
Phone: WAbash 6935

100 LAFAYETTE ST.
NEW YORK
Phone: CAnal 6-1646

Installs New Miehle

W. M. Welch Mfg. Co., Chicago, dealers in scientific apparatus and school supplies has installed a new Miehle 42 x 58 single color offset press in its lithographing department, where diplomas and scholastic yearbooks are produced. The company has been printing school annuals by the photo-lithographic process since 1931, according to E. C. Schroeter, manager.

•

Porter Sees Good Year Ahead

H. A. Porter, vice-president in charge of sales, Harris-Seybold-Potter Co., Cleveland, pointing out that the Graphic Arts is always one of the first businesses to feel the impetus of a sound business return, sees "good business ahead" for 1940 in the following statement issued early this month:

"I am glad to say a good word for 1939, and I have every confidence that it's safe to say a good word for 1940.

"The year 1939 has been a good year, not only for Graphic Arts but for business generally — particularly the last half of the year. When one considers the gloom of 1938 it is little wonder that in the light of present conditions those of us in the Graphic Arts look forward to 1940 with confidence.

"The Graphic Arts, I have noticed, is one of the first businesses to feel a decline. On the other hand, it is one of the first to feel the impetus of a sound return.

"I don't mean that all of us in the industry will always have everything as we want it during the new year, but rather that there is good business ahead for us to win during 1940 just as there is good business behind us that we have won through fighting during 1939."

"Well, chief, I told Cronin we would do the job 10 per cent cheaper than anyone else—but it's no go—they've found someone who will take it for 10 per cent less than that."

Schlegel Lithographing Corp., New York, held its Christmas party at the George Washington Hotel, Dec. 23. The program, arranged by William P. Haubert, Jr., included luncheon, dancing and door prizes.

Annual Christmas get-together of employees of Forbes Lithograph Co., Boston, held at the Chelsea plant last month. W. S. Forbes, head of the company, is at the head of the table, far right.

Siebold Distributes Bonus

Employees of J. H. & G. B. Siebold, Inc., ink manufacturers, New York, were given one week's salary as a Christmas bonus last month. The bonus was handed out by George B. Siebold, Jr. Following the distribution of the bonus, Mr. Siebold gave a party for all the employees and their friends.

•

Rayner Adds Another Press

Rayner Lithographing Co., Chicago, has added a second Harris 21 x 28 offset press to its facilities. The first was installed six months ago. Both presses were installed to replace old style stone presses. The company handles railroad tariff work, catalogs for chemical concerns, photo supply houses and others which require considerable typewritten copy.

•

Reports Technical Session

The National Association of Photo-Lithographers has distributed to its members complete proceedings of the "Share Your Knowledge" discussion held at the annual convention in New York last September. The booklet is a verbatim report of the technical questions asked at the session and the replies of a group of graphic arts experts composed of Joe Machell, Stecher Traung Lithograph Co., Rochester, N. Y.; Robert J. Butler, Fuchs & Lang Manufacturing Co., New York; George Cramer, Sinclair & Valentine Co., New York; John McMaster, Eastman Kodak Co., Rochester, N. Y.; I. M. Thorner, Agfa Ansco Corp., New York; Robert W. Reed, Lithographic Technical Foundation, Cincinnati; and Summerfield Eney, Champion Paper & Fibre Co., New York. The Association has also published a booklet outlining its plans and purposes for the new year for those interested in the activities of the N.A.P.L.

•

Join Chicago School Staff

W. T. Richards, cost finding and estimating expert with Magill-Weinsheimer Co., Chicago, has been added to the staff of the Chicago School of Printing and Lithography, Chicago. Mr. Richards will conduct night classes in estimating for both letterpress and offset work. Another newcomer on the faculty is Eugene St. John, well known writer for various trade journals, and former instructor in Western Reserve University's printing classes. Mr. St. John has taken over courses formerly handled by John S. Henderson who resigned to enter other work. Plans for enlarging the school's camera and plate making department to include instruction in color printing have been delayed due to illness of the director, Harold E. Sanger.

•

H-S-P Adds Beck

Louis R. Beck, advertising authority and research worker, has joined Harris-Seybold-Potter Co., Cleveland, to work on sales promotion and market analysis for the litho and chemicals department. He will be under the supervision of Harry Porter. Mr. Beck was formerly with Star Grilling Machine Co., and before that with Cleveland Tractor Co., Burroughs Adding Machine Co., Motor Rim Manufacturers Co., and Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce.

•

Estimating Course for St. Louis

Classes in Estimating, sponsored by the Associated Printers & Lithographers of St. Louis, will begin the evening of February 5, at the Adult Study Center, in that city. Charles Pollock, Skinner & Kennedy Stationery Company will be the lecturer. A course in Design and Layout will also be given starting February 6, at the same place, under the direction of Louis Herzberg.

CONCENTRATION

With concentrated Flintglo Offset Inks the lithographer can now accomplish results with a strikingly new appeal. This sheet is not varnished, the beautiful sheen being the natural finish of Flintglo Offset Inks.

Every Flint Ink Is a Good Ink

THIS insert was lithographed in Detroit by the Federal Lithograph Company. Only one impression of each ink was run on a single color 35 x 45 offset press. The paper used is an average price sheet, selected for its adaptability to gloss inks. Production speeds averaged 2800 impressions per hour.

Inks used: Flintglo Offset Red G-1074
Flintglo Offset Blue G-1075
Flintglo Offset Yellow G-1076
Flintglo Offset Silver G-1077

Flintspray solution, in a standard anti-offset spray, was used on each impression

Alert advertisers will welcome your suggesting this new conception of lithography

Manufactured Exclusively by

Howard Flint Ink Company

Detroit · Chicago · Indianapolis · Denver · New Orleans · Houston

NEW EQUIPMENT AND BULLETINS

To Make Litho Salts

Litho Chemical & Supply Co., New York, announces exclusive rights to manufacture and distribute Zuber's Lithographic Etch Salts. The necessary equipment for processing the product has been ordered and production will get under way sometime this month, it is announced. The salts will be produced primarily for export to countries heretofore dependent upon Germany for chemical supplies. However, the product will be offered to the American market very soon. Litho Chemical also announces two additional new products, a red and black negative stain and a red and black opaque.

•

Announces "Radiograf"

International Research Laboratories, New York, has just issued a folder describing the "Radiograf," a new remote control camera for lithographers and engravers. Among the special features of the new camera, according to the folder, are: 1. Will make negatives either in reverse or straight, but requires no prism or moving of the copy board, thus eliminating stripping of any kind or moving any part of camera. 2. Fulltilt copy board is synchronized with focal plane of negatives with its own controlled lighting system. 3. Push button concealed filter system. 4. Color temperature control.

•

Sleight Color Selector

Sleight Metallic Ink Companies, Philadelphia, have just issued the Smico Fan-Out Color Selector for distribution to the lithographic industry. The Smico Fan-Out Color Selector has been designed to provide a practical guide for use in the selection of color. The colors shown are Smico Standard Offset Inks. The selector shows samples of inks for litho posters, decalcomanias, labels, cartons, tin decorating and for specialty printing. Three varieties of offset aluminum inks are also shown, —one a ready mixed aluminum ink for general purpose lithography, the second, a powder known as Offset Aluminum Ink Separate; and the third, an offset aluminum paste ink. Copies are available.

•

New Film-O-Spra Gun

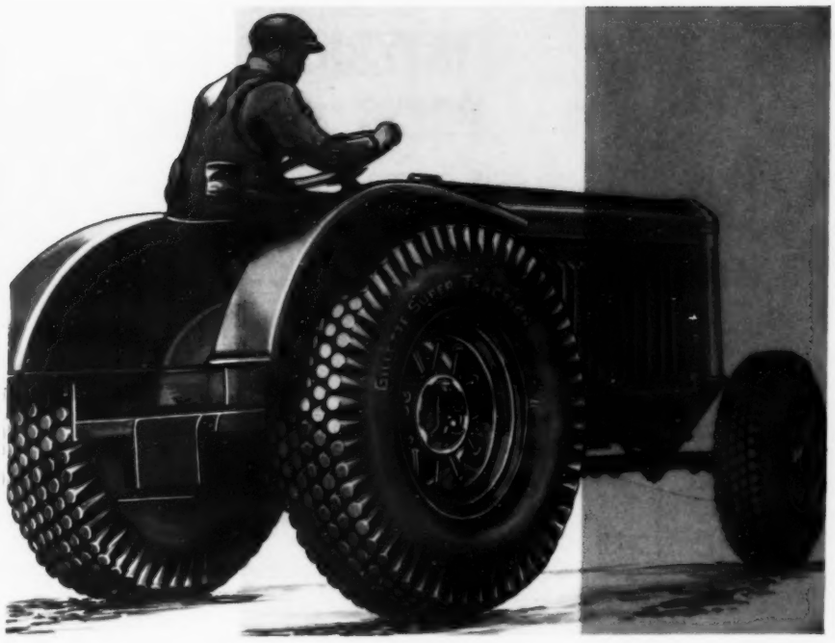
Film-O-Spra Co., Cleveland, announces the new Film-O-Spra self-contained non-offset gun for printers and lithographers. The new offset gun is supplied with a cast steel bracket, available for all types of presses, to facilitate attachment to press. The gun is operated by remote control of pressure release and is said to deliver a uniform spray which can be adjusted to fit the requirements of the printed form. Motor, compressor and pulsation tank of the Film-O-Spra gun are alined in order to utilize all heat generated by the motor and compressor, providing a drying agent for eliminating the moisture from the spray and delivering a dry deposit. Folders describing the new gun are available. Film-O-Spra Co. announces the appointment of W. D. Rogers, North Hanson, Mass., as distributor for its new spray gun in New York and New England States.

•

New Varityper Mailing Piece

Ralph C. Coxhead Corp., New York, is distributing a new direct-mail piece showing how the Varityper will save on production costs for bulletins, guides and miscellaneous reproductions of technical data. The broadside also shows illustrations of the 300 type founts used on the Varityper, and gives instructions and directions for operation. Copies available on request.

A prime consideration in equipping the new color matching laboratory of Braznell Co., St. Louis, was provision of the most perfect lighting facilities obtainable, according to G. Stuart Braznell. The lights selected are a combination of ultra violet ray and "Mazda" lamps. The new set-up has already proved a vast improvement, says Mr. Braznell, making it possible to get exact matches on dull days and at night time as well. Union Electric Co., St. Louis, designed the lighting system.



Announces "Hilite Process"

Carl G. Johnson Co., Eau Claire, Wis., announces the development of the "Hilite Process" for improvement of lithographic half-tone negatives. The process according to the company, has been in use for some time by photo-engravers but its application in the offset field is new. The illustration above shows the contrast resulting from use of the process.

•

First Aid for Artists

Harper & Brothers, New York, have recently published "First Aid to Pictorial Composition" by Walter Jack Duncan, a practical handbook for artists and students. By the simple method of rule and example this book offers art students and art directors a practical guide book for the study of pictorial composition. The author declares that, "impatient with stale doctrines and moribund theories" about art, he has attempted to compose a book which answers the demand for "action and less words" by the student of art. The practical plan of the book issues from this premise. All the various devices for achieving balance, distribution, rhythm, proper line and perspective, lights and shadows, primitive composition, murals, color, as well as how to avoid common errors of composition are explained clearly and concisely. One hundred and ten reproductions of famous works, each one an outstanding illustration of a rule, provide the visual demonstration for technics the student will find indispensable and easy to apply. Says *Art Instruction*, "Walter Jack Duncan is one of America's 'old Masters' of pen illustration. Beautiful in technic as his works are, it is not the way he handles his pen that makes them especially noteworthy. There is in them a sense of reality and authenticity. He is a good composer, too, and he gives as much thought to the design of his pictures as a painter does to his canvases." "First Aid to Pictorial Composition" is priced at $2.50.

•

"Design By Light"

J. H. Jansen, Cleveland publisher, has just released "Design By Light," a new book which describes a method of translating any given object into black and white drawings, or designs in color, by projecting the object's shadow with the aid of artificial light. Through the method, a pattern of the commodity to be advertised is reproduced on displays, in the pages of catalogs, in school annuals, etc. It may be a realistic interpretation or an abstraction of the subject, as the artist wishes. "Design By Light" is illustrated with ninety-eight studies in pattern of such advertised commodities as tobacco pipes, hats, electric irons, women's shoes, electric lamps, gears, lock washers, etc. It is an interesting book, the principles of which may be used with novel effect in creating displays, direct mail, catalogs, and other advertising in which something out of the ordinary is wanted.

•

New DeVilbiss Spray Outfit

DeVilbiss Co., Toledo, Ohio, has introduced a new direct dry-spray outfit to serve spray equipment users where medium and small, light duty, equipment is required. The new spraying equipment, known as Type NCK, is operated by a 1/3 HP motor. It is of the piston type, the compressor being directly connected with the motor, and is said to have a displacement of 4.58 C.F.M. The compressor is a single cylinder, ball-bearing type, with 2″ bore and 1½″ stroke. The maximum working pressure, it is announced, is forty pounds. It is equipped with a twelve-foot length of electric cord with attachment plug and switch at motor.

•

New Ben Day Booklet

Ben Day, Inc., New York, is distributing a new and revised booklet illustrating its complete assortment of Ben Day shading mediums. Copies are available.

•

New Maxwell Portfolio

Maxwell Paper Co., Franklin, Ohio, is distributing a new portfolio of offset papers containing representative samples selected at random from production runs using Maxwell Offset.

•

Analyzes School Market

"Go to School to Increase Your Food Sales" is the title of a folder recently published by the *Instructor Magazine*, analyzing the food market represented by the schools in the United States. Figures are given showing the size of the box lunch market, giving estimates of the number of pupils who eat their lunches at school; and the school cafeteria market which shows a breakdown of the size of the school and the kinds of food products served. The booklet should be of interest to the creative lithographer anxious to cultivate this particular market.

BY ORDER OF RUSLING WOOD INC.

LIQUIDATION SALE

FOR ACCOUNT OF CREDITORS
THE UNDERSIGNED WILL SELL AT

PUBLIC AUCTION

ALL MACHINERY AND EQUIPMENT BY CATALOG

on JANUARY 23rd, 1940

AT 11 A.M.

LARGE LITHOGRAPHIC PLANT

LOCATED AT
216-218 WILLIAM ST., NEW YORK CITY, N. Y.

—Plant Consisting of—
PRESS ROOM

2–2 Color 45x65 Miehle Offset Presses equipped with Dexter Feeders.

2–Single Color 45x65 Miehle Offset Presses equipped with Dexter Feeders.

2–2 Color 38x86 Hall Offset Presses equipped with Dexter Feeders.

2–48x86 Single Color Hall Direct Presses (Hand Feed).

2–48x86 4-Color Hall Direct Presses equipped with Dexter Feeders.

4–Ross Ink Mixers (1–300 lb., 1–150 lb. and 2–60 lb.) Material & Inks.

1–Fuchs & Lang Bronzer Machine with motor, 12 Asst. Hydraulic Lift Trucks, quantity of skids, 2,000 drying racks, box trucks, and steel lockers.

Approximately 12,000 Clear and Grained Assorted Glass

1800 Assorted Aluminum Plates

Woodworking Machinery–Machine Shop–Office Equipment

Large Quantity Offset, Poster and Board Stock, and many other items too numerous to mention.

This sale is for cash and immediate removal

Open for inspection daily, from 9 A.M. to 5 P.M. .to day of sale.

Catalogues Upon Request

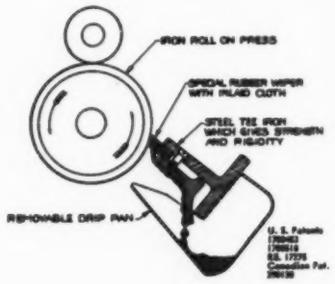
For further details regarding this sale communicate with

HERMAN N. ZEKIND

AUCTIONEER
Successor to Frank E. Gore
51 Chambers Street New York City, N. Y.
Phone: WOrth 2-6286

INTERNATIONAL PRESS CLEANERS

are daily demonstrating their efficiency in increasing Output and Lowering Production Costs



THIS IS OUR METHOD OF REMOVING INK FROM PRESS

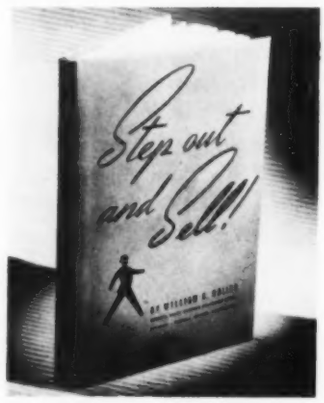
We invite you to take advantage of our thirty day trial offer. If interested write and let us know the size and make of your press.

INTERNATIONAL PRESS CLEANER & MFG. CO.

112 Hamilton Ave.
Cleveland, O.

STEP OUT AND SELL

By WILLIAM E. HOLLER, General Sales Manager, Chevrolet



Size 6 x 9 inches. 96 pages. In striking cloth binding. Comes in a gift container. A handsome distinctive gift. Price $1.50 each.

$1.50

- Get a copy for yourself — you will treasure it always. It will come as a mental tonic!
- Give one to each of your salesmen and service men. It will give them a flying start for 1940.
- Give one to your best customers and prospects. They will value it highly and as a gift it will click with them.

Rolling off giant presses are first copies of a great new book on selling by "Bill" Holler, Chevrolet's record-crashing general sales manager.

No ordinary book this, but a vivid, dynamic picture of the sales experiences and philosophies that Holler has used to build up an enviable record.

Even if you never read a book in the ordinary way, you cannot afford to pass up "Step Out and Sell." In it you will find more sales common sense than in ninety-nine other books on salesmanship.

Already more than ten thousand copies of this book have been put on order. Get it today and capture permanently the sales wisdom that has put Holler where he is.

Order Your Copy Today From

MODERN LITHOGRAPHY
254 WEST 31st STREET
NEW YORK, N. Y.

New York Photo-Lithographers Christmas Party

New Pond's Creams display cards created and reproduced by Oberly & Newell Lithograph Corp., New York. The two cards at the left were designed primarily for variety store use, in eight colors from a direct color photograph mounted to 100 pt. thickness and supplied with a double wing easel. At the right the same illustration has been designed especially for export distribution.

Clifton A. Crocker Dies

Clifton A. Crocker, 81, president of Crocker-McElwain Co., Holyoke, Mass., one of the nation's largest paper manufacturing concerns, died last month. Mr. Crocker was made president of Crocker-McElwain when it was organized in Holyoke in 1903.

•

Craftsmen Hear Conquergood

Charles R. Conquergood, president of Canada Printing Ink Co., Ltd., Toronto, addressed the Chicago Club of Printing House Craftsmen at its December "Ink Night" meeting. The program also included a showing of International Printing Ink Company's new technicolor sound movie, "Keeping in Touch." Mr. Conquergood asked for closer cooperation between printers and ink makers. Differences of opinion can be readily adjusted if users and makers of ink get together to determine what is wrong, he said.

•

Annual Christmas party of the New York Association of Photo-Lithographers, held at the Hotel New Yorker last month.

On Trip to Orient

Louis Goldberg, vice president, United American Metal Co., Chicago, and prominent in activities of Printers Supplymen's Guild in that city, is on an extended business trip to the Orient. Mr. Goldberg left San Francisco by Clipper plane last month with Manila as his first objective. Later he was to visit Hong Kong, Shanghai, if possible and other Asiatic points where the company has jobbing house connections.

•

Ernst W. Boernke Dies

Ernst W. Boernke, 58, employment manager of Western Printing & Lithographing Co., Racine, Wis., died last month. Mr. Boernke had been associated with the firm for 31 years and employment manager for the last seven years. He was a member of the Racine-Milwaukee Club of Printing House Craftsmen.

•

New Warren Distributors

S. D. Warren Co., paper manufacturers, Boston, announces that Marquardt & Co. and Schlosser Paper Corp., both of New York, have been added to its list of distributors in that city. These are in addition to Alling & Cory Co., Canfield Paper Co., Lathrop Paper Co., J. E. Linde Paper Co., and Henry Lindenmeyer & Sons, present Warren distributors.

Whither Deep Etch?

(*From Page 27*)

A little known application of the deep-etch process which is sometimes very valuable as a short cut is its use in the making of negatives or positives. For this use, a sheet of celluloid or specially coated glass is coated with the deep-etch coating and exposed under the negative or positive to be reproduced. After exposure, the print is developed in the usual way with the deep-etch developer until the coating in the unexposed parts has been entirely removed. After this, a heavy, staining dye solution is worked into the developed parts in much the same way that developing ink is applied to a plate. This stain penetrates slightly, forming an opaque image. Then the deep-etch coating is washed off and when dry the negative or positive so formed is ready for use.

The peculiar value of this process lies in the fact that a negative is produced from a negative or a positive from a positive and the image is reversed from left to right. Therefore, by this method a photo-engraver's negative can be reversed for offset; a set of offset negatives on heavy glass can be reversed so that positives for deep-etch can be made; and positive impressions from litho stones which were originally engraved for direct printing can be reversed for offset printing.

To summarize, we find that the use of deep-etch is increasing rapidly, not alone, for exceptionally fine offset work but also in applications where its use saves time and materials. Expected changes in offset platemaking seem to encourage rather than hinder the further use of deep-etch.

•

Ink Consistency

(*From Page 25*)

whether an ink will fly or mist at printing speeds. It eliminates personal judgment with regard to livering and other aging characteristics. It should prove much more satisfactory than viscometers now used in determining the oil-absorption of pigments.* It should enable much to be learned regarding the relationship between ink consistency and paper characteristics, temperature, and speed of printing. Further information regarding the Inkometer and on the theory of ink consistency measurement can be obtained from Technical Bulletin No. 2, issued by the Lithographic Technical Foundation, Inc., 220 East 42nd Street, New York.

*See "Standard Methods for Testing Ink Colors," American Ink Maker, 16, No. 9, Sept., 1938, pp. 55-58.

•

We Chose Lithography

(*From page 33*)

wrong: I am not advocating a wholesale turnover of pressmen, and platemakers and photographers. On the contrary. It would be madness to even think of dispensing with the services of craftsmen who have been with a firm for years and have helped establish that firm's reputation for quality and service. But I am advocating that the employer himself, or his personnel manager, give more attention to the selection of craftsmen in the shop so that there is always a steady, if small, infiltration of younger personnel trained in the latest methods. By maintaining a proper balance of old with new, the wise employer will find, not friction, but that proper blend of courage and judgment which is so essential to progress.

Too often the employer does not know what is going on in his shop. He is too busy selling. He is too busy chasing after ideas which will bring him more business. I have known of instances where young men looking for jobs were turned away by foremen for no other reason that I could discover than that they knew more than he himself did. They had been trained differently. He was reluctant to take them on because it would have meant a change in his way of doing things, and he was opposed to change, not on principle perhaps, but because the methods he had been following for twenty years were so firmly rooted that psychologically he was incapable of it. This is not to condemn the foreman for that. Follow a certain routine for twenty years and see how hard, if not impossible, it is to unlearn what those years have taught you. No, it is rather a condemnation of the employer that such a condition, through inattention to personnel and management problems, should have been allowed to develop.

Don't draw the conclusion, either, that all shop foremen are obstacles in the path of progress. There are many foremen—and since our industry *has* made truly remarkable strides the accomplishment of which could not have been made without them, let's say they are in the majority—that have been leaders. But the point I would like to establish is that they have been progressive in spite of the employer. In my opinion—and since this is the first time and will undoubtedly be the last time I shall have the privilege of airing my views for the benefit, if that is the word, of management, I might as well dish it out—in my opinion, the average employer in the offset industry could do no greater service during 1940 to himself and his industry than to found and adopt a sound and progressive personnel and management policy, with which he will be in close contact at all times, affecting the hiring of new employees. "Today's youth are tomorrow's men of industry" is an old bromide, but, nevertheless, a true one. As every offset plant derives its living and existence from the litho industry, let it also serve the industry by lending a sympathetic ear to new, young, logical and practical ideas for the preservation and advancement of fine lithographic work.

•

Analyzes Envelope Industry

David Hearsh, president of Berkowitz Envelope Co., St. Louis, is the author of an article published in a recent issue of *St. Louis Commerce*, publication of the Chamber of Commerce, describing the envelope industry of St. Louis. Four envelope manufacturing plants in St. Louis, the article stated, produce the bulk of the production in that city, which in 1937 amounted to $1,844,549. The concerns represented, in addition to Berkowitz, are Cupples-Hesse Envelope & Lithographing Co., St. Louis Envelope Co. and Envelope Manufacturing Co.

Offset Paper at Work

(*From page 27*)

by offset is better suited for endurance.

The durability of paper is becoming a more serious problem than before the introduction of chemical wood fibers. In 1882, when the sulphite process first went into operation in this country, printing papers were universally made of rags alone. About the same time the halftone process was coming into prominence, and in order to produce a smooth enough surface it was necessary to load the papers with clay and give them a high finish. Coated book paper was first produced at this time to satisfy the requirements of finer screen engravings. The result of lessening the strength of book papers is becoming a problem to our public libraries. Recent statistics show that paper at work in lending libraries wears out too easily. The cost of repairing books exceeds in some cases seven per cent of the total expenditures of the library. As the report of the Library Association pointed out, "A book printed on Featherweight (i.e. high bulk) paper costs the librarian more in the end than one that will take rebinding stitches."

It is equally true that books printed on heavily loaded paper, or on enamel stock must also cost the librarian more in the end than books on stronger papers, and papers containing a lower percentage of mineral filler.

We cannot overlook the value of opacity in book paper and the function of clay filler in this respect, but with the recent introduction of other fillers which lend greater opacity, the amount of filler can be reduced considerably. Since filler increases the weight without increasing the strength, and as filled papers are both weaker and thinner than equivalent weights of paper made without filler, or with only a small addition of mineral, the minimum desirable opacity can now be obtained without excessive loading. Such papers however, do not lend themselves to halftone printing, whereas they do to the offset process.

All this suggests the possibility of the offset process for a wider use among book publishers.

Among other arguments to be advanced is that illustrations can be included in the text, and a paper free from eye-disturbing gloss can be selected, which at the same time has durability.

Another argument for offset printing where hard, strong papers are to be used, is the wear on type and engravings. As evidence of this we reproduced identical paragraphs of type printed letterpress on five different papers. The number of impressions in no case exceeded 5,000. These paragraphs were re-set and from the proofs pulled of all the paragraphs, zincs were made, from proofs of which the wear on the type was obvious.

We have to recognize, nevertheless, that there is an ample field for both offset and letterpress printing, and certain kinds of work where each excels. Neither should invade the latter except to benefit the consumer.

•

Color Filters and Emulsions

(*From page 18*)

yellow and you wish to reproduce it as black, the blue filter will give you the proper visual effect. You will be able to get the desired result on any of the three types of emulsions since they all are sensitive to the blue rays transmitted by the filter. However, because of the lack of yellow sensitivity, yellow can be recorded as black on color-blind film and plates without a filter. If the desired effect is obtained when viewing the copy through a green filter, use that filter with either orthochromatic or panchromatic emulsions. When a red filter shows the desired visual relationship, only panchromatic film or plates may be used. Figure 5 shows how the various colors reproduce through certain filters on the three types of emulsions.

Occasionally copy will contain a combination of colors which cannot be separated as desired in one exposure. In such cases, two or more negatives must be made which are composed into one negative. Two such negatives can be made into one negative by combining them into one positive by means of double printing and then making a contact negative from the combination positive.

Travel, 1940 Style

(*From page 15*)

railways and other large carriers may tend to become concentrated in a few plants in a few cities, but the tens of thousands of individual resorts scattered throughout the country offer unlimited opportunities to the lithographer. Of course, it is absolutely essential for the lithographer to understand the basic selling problem of the travel and resort markets, as well as to produce his work with technical and artistic excellence. The travel agent should be a most valuable source of advice in preparing dummies and copy.

There is no partiality in the minds of the major travel advertisers for either the offset or letterpress process for reproduction. Both are used, the choice depending on the job at hand. The major producers of travel material almost universally employ four colors. Kodachrome reproductions appear to be increasingly popular. A leading agency specializing in travel accounts notes a trend towards the use of fine art for covers and displays. Color photos are also widely used on covers, reproduced by offset with rare delicacy of tone.

These details, however, are relatively unimportant. The important thing is that 1940 opens the door of opportunity wide to all creative lithographers who are alert to the fact that American travel is about to enter a new phase of development, requiring sales literature of a high order of originality and appeal. The time is at hand for scrapping the old stereotype advertising literature, copy and format, and doing a job in key with 1940's specifications.

•

Lithos Help Direct Drive

Chicago graphic arts industries were assigned a quota of $65,000 in that city's annual Community Fund drive to raise $3,611,000 for charitable work. The lithographic industry is represented by Charles J. Powers, Chicago manager, Lithographers National Association; Harold Sanger, director, Chicago School of Printing and Lithography; and Russell Miles, *Midwestern Lithographer.*

LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department of Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents in coin or U. S. stamps. Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio.

Photography and Color Correction

A New Photographic Sensitometer. W. M. Cady. *Journal of the Optical Society of America*, 29, No. 11, Nov., 1939, pp. 470-1. A sensitometer is described which affords a continuous variation of illumination across the sensitive surface. Two intensity ranges are available, using the same source of light and the same exposure time; with both ranges, the instrument can give an over-all variation of intensity in the ratio 2000:1. No lenses or moving parts are needed, and the sensitometer is strictly neutral with regard to wave-length.

Color Control in Reproduction. A. E. Leroy. *Photo-Engravers' Bulletin*, 29, No. 4, Nov., 1939, pp. 122-4. The use of a densitometer in making color separations from Kodachrome is necessitated by the wide tone range of Kodachrome transparencies.

Double Negatives. F. Denton. *Modern Lithographer and Offset Printer*, 35, No. 10, Oct., 1939, p. 200. When a screen tint background is to be used, or line or type matter has to be reproduced in half-tone composite subjects, a greatly improved result can be obtained by making two separate negatives, one line and one halftone. With register marks to aid in printing down, the two negatives are exposed one after the other. Although the type will be cut up somewhat by the dots, it will have the crispness of line work.

Scientific Procedure in Color Photography. A. C. Austin. *National Lithographer*, 46, No. 11, Nov., 1939, pp. 26, 28. The use of scientific devices in color photography will eliminate errors, improve quality, and save time. Electric timing and voltage control instruments for determining correct exposures, water-cooled tanks for simultaneous development of separation negatives, densitometers, and color temperature meters are invaluable. Color proofs made by toning paper prints made from half-tone separation negatives are useful.

Photography, Principles and Practice (Book). C. B. Neblette. *American Photographic Publishing Company*, 353 Newbury Street, Boston, Mass. 3rd Ed. 652 pp. $6.50. Every type of photographic work and equipment is fully explained in this book. It reflects all the recent advances in color sensitizing, tone reproduction, fine grain development, fixation, improvement of the negative, and color photography. In every case there are charts, formulas, diagrams, photographs and full working directions to make clear every principle and every detail of technique.

Method and Means for Making Corrected Color Separation Images. A. C. Hardy (to Interchemical Corp.). *U. S. Patent* No. 2,179,786 (Nov. 14, 1939). The method of producing a corrected color component image of a colored object by use of a photographic element having two sensitive layers permanently attached to a support, which comprises forming a negative image of one of the primary color components of the colored object in one of the sensitive layers, forming a positive image of another of the primary color components of the colored object in the other sensitive layer, the positive image being superposed and in register with the negative image, and printing both images simultaneously to form a corrected color component record of the colored object. A photographic film for making color separation negatives comprising a back layer of a relatively fast negative photographic emulsion containing a dye sensitizing the emulsion to light in one spectral region, and a front layer of a relatively slow direct positive photographic emulsion containing a dye sensitizing the emulsion to light in another spectral region.

The Development of Photography in Photo-Engraving. Dr. H. C. Carlton. *Photo-Engravers' Bulletin*, 29, No. 4, Nov., 1939, pp. 105-14. This article discusses the work of Niepce and Daguerre, the Calotype process, the wet plate process, dry plate history and modern dry plates, Wratten filters, stripping film, special films for photo-engraving, the Eastman densitometer, and color films including cut-sheet Kodachrome.

Problems of Color in Theory and Practice. H. D. Lester. MODERN LITHOGRAPHY, 7, No. 11, Nov., 1939, pp. 28-29, 51. Following a statement of the definition and theory of color, the deficiencies in the subtractive process causing distortion of color are enumerated. The production of a good neutral gray scale from superposed primaries is difficult because: (1) the three negative records will vary in contrast gradient, (2) the dyes and pigments do not conform to theoretical selective absorption, and (3) the contrast gradients of the color scales may vary. The practical procedure must be as follows: (1) the three negatives should bear a record of a neutral gray scale chart; (2) they should be developed to the same gamma; (3) a sample should be kept of the most perfect neutral gray

scale printable upon the material in question; and (4) necessary compensation for any departures from the neutral gray test chart should be made in development, exposure, paper, and pigment.

Modern Trends in Color Correction. H. H. Lerner and W. Perelstrus. *Photo Technique*, 1, No. 7, Dec., 1939, pp. 35-40. In this second and concluding article on modern masking methods, the authors consider in detail (1) corrections for photo-mechanical use, (2) separations and masks for color printing by photographic processes, (3) density ranges desired in negatives for Chromatone, Wash-off Relief, and Carbro printing processes and for photo-engraving, photo-offset, and gravure reproduction, (4) separations from Kodachrome, and (5) the problems of black printers. A list of common sources of trouble and their remedies is included, and enlarged pictures of small portions of corrected and uncorrected progressive proofs are shown.

Slide-Rules for Photographers. F. H. Smith. *Process Engravers' Monthly*, 46, No. 551, Nov., 1939, p. 369. A sliderule herein illustrated gives the variations in screen distance against magnification. As the stop sizes are expressed in "f" numbers, a second rule enables the finding of the "f" number of any Waterhouse stop from the focal length of the lens and the size of the stop.

Totalux. *Photo-Engravers' Bulletin*, 29, No. 4, Nov., 1939, pp. 287-9. The Totalux Exposure Meter will enable a uniform exposure to be obtained regardless of variations in arc intensity due to line voltage variations or other causes. A photo-tube is placed near the copyholder, and the associated electrical circuit integrates the light intensity-time curve during exposure. Before exposure a dial may be set manually to any predetermined value, which dial during exposure moves automatically in a clockwise direction and at a speed proportional to the light intensity. The construction and operation of the meter is described.

Planographic Printing Surfaces and Plate Preparation

Plate Graining in Practice. J. J. McKenna. *National Lithographer*, 46, No. 11, Nov., 1939, p. 18. The plate grainer should have first hand knowledge of the type of work to be put on the plate. The grain must be suitable to each particular job, and must be the right depth to suit both transferrer and pressman. To minimize breaking down of the grain on the press, it must be remembered that the grain is no better than the metal on which it is made.

Monel Litho Plates. R. T. Barnes, Jr. MODERN LITHOGRAPHY, 7, No. 11, Nov., 1939, pp. 24-7. Monel metal is useful as a litho plate material because it has high mechanical strength and ductility, good resistance to corrosion and wear, good wettability, and ready amenability to preparation by accepted trade practices. As Monel plates are caused to curl from the grained side along their length by the graining process, a curl in the opposite direction must be applied prior to graining. As a result of Monel's corrosion resisting properties, plates may be stored for long periods, contamination of inks on the press by corrosion products is lessened, and albumin or gelatin plates may be reclaimed by the application of caustic soda. Monel plates have been used successfully for gelatin, albumin, and deep-etch printing, and for certain more recent special processes. Photomicrographs and tables illustrate the article.

Litho Press Plates of Stainless Steel. R. Fritsche. *National Lithographer*, 46, No. 11, Nov., 1939, pp. 20, 53. Stainless steel litho plates are grained with carborundum abrasive and steel balls in a high speed grainer, and are made by the usual albumin, deep-etch or transfer methods, with the exception of one special etch used after development. Advantages of this type of plate are: (1) longer lasting grain (continued use without regraining), (2) non-corrosive features (impervious to acids and alkalis from fountain, inks or paper), and (3) the use of colors containing lead chemicals without difficulty. Stainless steel sheets in gauges under 0.020 thickness are available only for plates up to 36 x 44 inches, and the cost of new plates is higher than zinc or aluminum. Monel plates, Basebond Litho Sheet, and bi-metallic plates are discussed briefly.

Photo-Litho Plates. A. Fifer, *Modern Lithographer and Offset Printer*, 35, No. 10, Oct., 1939, pp. 197, 204. If a photo-litho plate needs improving by rolling up or washing out, the plate is not as good as it should be and should be discarded. The direct screen negative has been replaced by the contact negative made from a retouched positive. For albumin work, the actual development is indicative of good or bad working. The grain of the plate, coating, exposure, inking, and developing are discussed.

Paper and Ink

Litho Varnishes. J. Mattiello. *American Ink Maker*, 17, No. 11, Nov., 1939, pp. 23, 47. Varnish manufacture is now to a large extent scientifically controlled to insure uniformity. The acid number of a varnish is a good indicator of its wetting and livering tendencies, and should be low. The viscosity of the varnish plays an important part in the consistency of the finished ink. The varnish maker and ink maker must cooperate in fixing standard viscosity values. The iodine number is important in ink and varnish drying, but cannot be controlled. The color of the linseed oil and the method of heat processing affect varnish color.

Classification of Pigments. V. C. Vesce. *American Ink Maker*, 17, No. 11, Nov., 1939, pp. 25-26. Under the new "Classification of Pigments," all pigments can be divided into 11 groups, each identified by certain chemical properties. The identification, properties and examples of each class are reviewed. Benzidine type organic yellows have two or three times the tinctorial value of hansa yellows but are not as fast to light. A progress report on the production of soft

textured pigments, done by treating the wet pigment or presscake with a small portion of water-immiscible solvent, is presented. A new identification test for coloring matter involves the microscopic identification of the kind of crystals formed when a reagent is applied.

Offset Inks. Anonymous. *American Ink Maker,* 17, No. 11, Nov., 1939, pp. 20-22. Questions on offset ink properties and problems, answered by G. Cramer and R. Butler at the "Share Your Knowledge Clinic" held in connection with the annual meeting of the National Association of Photo-Lithographers in New York, are presented. The ink drying problem is stressed.

Ink and the Offset Printer. G. W. Whitfield. *British and Colonial Printer and Stationer,* 125, No. 576, Nov. 2, 1939, pp. 358, 360. Scumming and emulsification are caused by: (1) inexperienced press operation and poor plate preparation, (2) the solution of certain substances from the coating of the paper by the damping water, and (3) faulty ink. Polar-non-polar grease molecules cause scumming by linking polar water with non-polar ink, but they also cause the ink to take on the polar image. Therefore an ink should be balanced as to quantity of grease so that the image is well fed and scumming troubles are absent. Dopes and fountain solutions should be used very sparingly. A correctly balanced reducer which will soften the ink without causing it to become sloppy should be used.

Drying Black Ink on the Offset Press. J. Stark *Lithographers' Journal,* 24, No. 8, Nov., 1939, pp. 326, 347. The chief factors contributing to the non-drying of lithographic inks during the summer months are excessive humidity and the use of pile deliveries. Air-conditioning equipment is an excellent remedy, but not practical in all cases. The following aids are recommended: (1) hanging up the sheets in small lots and circulating a current of air through them, (2) the addition of cobalt drier with a proportion of lead and manganese driers to insure thorough drying, and (3) keeping the water supply on the press down to a minimum.

The Neenah Expansimeter. J. A. Van den Akker. *Paper Trade Journal,* 109, No. 22, Nov. 30, 1939, pp. 105-6. A description and illustrations are given of the Neenah Expansimeter, a simple but quite accurate instrument for measuring the expansion or contraction of papers caused by change in relative humidity.

Equipment and Materials

New Light for the Photo-Engraver. R. E. Farnham. *Photo-Engravers' Bulletin,* 29, No. 4., Nov., 1939, pp. 91-4. Reflector and projector lamps, fluorescent lamps, Evenlite incandescent lamps, and the H-6 mercury vapor lamp are described and their applications in the graphic arts field are noted.

General

Photo-Litho at the Bureau of Engraving. C. E. Marx. *National Lithographer,* 46, No. 11, Nov., 1939, pp. 14-5, 42. A detailed description of the procedures followed in making albumin, deep-etch, and high-etch lithographic plates is given. High-etch plates require longer to make than albumin or deep-etch, but possess the following advantages: (1) elimination of water in printing, (2) durability, and (3) long runs and good quality of work.

Offset Lithography and Rubber Relief Printing. F. A. Hacker. *National Lithographer,* 46, No. 11, Nov., 1939, pp. 30, 34. *Printing Equipment Engineer,* 59, No. 2, Nov., 1939, p. 30. In the offset process rubber relief plates may be used for imprints and price changes. In one method the desired area of the blanket is cut away, the relief plate is applied to the space with a special adhesive, the corresponding area on the offset plate is made to take ink, and the ink is transferred simultaneously to blanket and rubber plate and then to the paper. In a second method the rubber relief plate is mounted on the blanket cylinder, the plate cylinder acts as an inking roller, and the dampening mechanism is disconnected. This method is not recommended for the general run of work or where ink distribution is of prime importance.

Miscellaneous

Review of Copying Processes. Anonymous. *Photo Technique,* 1, No. 6, Nov., 1939, p. 38 (Condensed from Photographische Industrie, July, 1939.). The following iron salt methods for producing direct positive images are discussed: (1) the cyanotype method, (2) the iron gallate process, and (3) the iron-silver sepia method. Formulas are included. In the original article the Kallitype process and other iron methods of little practical merit are described.

•

George H. Le Huray Dies

George Hartley Le Huray, 79, until recently president of Le Huray & Co., New York lithographing concern, died last month. Mr. Le Huray was one of the original thirty-six men who signed the Articles of Incorporation of the Lithographers' National Association, New York, in 1906. He is survived by four daughters and a niece. Mr. Le Huray was succeeded to the presidency of Le Huray & Co. by William Commons.

•

Form Young Execs. Group

Meetings of a newly-formed Young Executives' Group, sponsored by the Associated Printers & Lithographers of St. Louis, will be inaugurated soon. Lithographing and printing concerns have been asked to submit the names of junior executives who might desire to enroll.

•

Celebrate Ladies Night

Ladies Night was observed by the Lithographers Club of Chicago on January 13, at the Knickerbocker Hotel. Over 300 persons enjoyed the dinner, and the floor show and dancing which followed.

•

Oberly & Newell Co., New York, has installed a new No. 69 Miehle, two-color 45 x 68 offset press.

New 24-sheet poster for Italian Swiss Colony Wines lithographed by Continental Litho Corp., Cleveland.

Defining the American Way

Humphrey B. Neill in collaboration with Howard M. Cool are authors of a new book entitled "Understanding American Business," recently published by the Macmillan Co., New York. Mr. Cool is director of the Division of Consumer Interests, National Better Business Bureau. It is pointed out that every year Better Business Bureaus throughout the nation handle more than a half million inquiries and complaints from the public. The authors, noting the widespread interest in business, coupled with the lack of rudimentary business knowledge evident in the inquiries, felt that the idea of relating in popular non-technical style a general story of what constitutes American business would fill a definite need. "Understanding American Business" is the product of that idea. It is a thoroughgoing discussion of the principles that govern business transactions. The authors show that while business practices and policies change rapidly in keeping with an ever-changing world, the principles that govern business transactions remain relatively constant, and it is these which are defined. The book has been made suitable for students in secondary schools and for other educational groups. Priced at $1.92.

•

Warren House Organ Manual

S. D. Warren Co., Boston, paper manufacturer, has just issued another in its series of books designed to stimulate more business through printing. The latest is "More Business Through House Organs," a complete analysis of the types of house magazines, their editorial preparation, format and style. At a dinner at the Hotel Vanderbilt, New York, last month, Don Maculay of the Warren Company explained the contents of the new book before a large gathering of present and probable users of house magazines. The book and the story behind its preparation was also presented before a meeting of the Associated Printing Salesmen in New York on January 16th.

•

Meat Packing Folder

"Meat Packing" is the title of a promotional booklet recently published by *The National Provisioner,* trade paper, which may be of interest to those lithographers who sell or are contemplating selling to the meat packing industry. Statistics contained in the pamphlet show that the meat packing business is equal to 31 per cent of the total value of all food products marketed, doing an annual business of approximately three and a third billion dollars.

•

Issue Youth Survey

Young America, a national news weekly for youth has just published a survey called "Youth, Its influence and Ambitions, Taste and Purchasing Power." This is the second annual survey on youth by the paper with the assistance of International Business Machines Corp. More than fifty companies cooperated in the preparation of the material. The survey was made to find out what youth buys and his worth to the advertiser. The survey was made during May and June, 1939 in the main trading areas of nine leading states. For example, answers to such questions as: What is your favorite radio program? What is your favorite hobby? What is your favorite soft drink? What cereal do you eat most? What is your favorite dessert? What is your favorite gum? Do you own a camera? Do you own a fountain pen? What kind of soap does your family use? were gathered and the results tabulated in the survey.

•

Color Handbook

Thomas S. Curtis Laboratories, Huntington Park, Calif., has just published "The Curtis Color Handbook" by Thomas S. Curtis, an interesting little volume on color photography. While Mr. Curtis had the amateur in mind when he wrote this book, it nevertheless contains much worthwhile information for the professional also. Such subjects as the sensitive materials for the color camera, light for color photography, making the color exposure, the color laboratory or dark room, and color printing on paper are discussed in an enlightening and informative manner. This book is not recommended for the professional anxious for the last word on color photography, but rather as an interesting supplement to his work.

•

Name Wadewitz

E. H. Wadewitz, President of Western Printing & Lithographing Co., Racine, Wis., and President of the Lithographers National Association, New York, has been elected a vice-president of the Association of Commerce of Racine.

•

Moves in with Buckley, Dement

Derckum Industries, Inc., Chicago, has moved its decalcomania department into the Buckley-Dement Building, 1300 West Jackson Blvd., where production of its line of decals will be handled by Buckley, Dement & Co.

•

Installs New Miehle

Gunthorp - Warren Printing Co., Chicago concern doing both letterpress and lithographing work, has installed a new No. 60 Miehle 42 x 58 single color offset press.

"WHERE-TO-BUY-IT"

NOTE: This is a classified list of the companies which advertise regularly in MODERN LITHOGRAPHY. It will aid you in locating advertisements of equipment, materials or services in which you are particularly interested. Refer to the Advertisers' Index, on page 65 for page numbers. *"Say you saw it in Modern Lithography."*

CHEMICALS

Agfa-Ansco Corp.
Eastman Kodak Co.
Harris-Seybold-Potter Co.
Philip A. Hunt Co.
Litho Chemical & Supply Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Norman-Willets Co.
Phillips & Jacobs
Harold M. Pitman Co.
Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
E. T. Sullebarger Co.

GRAINING AND REGRAINING

(Zinc, Aluminum, Glass and Multilith Plates)
Allan B. Croke & Co.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
International Printing Ink Corp.
Litho Plate Graining Co. of America, Inc.
Reliable Litho Plate Graining Co.
Senefelder Co., Inc.
Standard Litho Graining Co.
Texas Offset Supply Co., Inc.
Western Litho Plate Co.

GRAINING AND REGRAINING MATERIALS

American Graded Sand Co.
International Printing Ink Corp.
Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.

INKS—(Varnishes and Dryers)

Crescent Ink & Color Co. of Penna.
Martin Driscoll & Co.
Howard Flint Ink Co.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Gaetjens, Berger & Wirth, Inc.
International Printing Ink Corp.
E. J. Kelly Co.
F. G. Okie, Inc.
The Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair & Carroll Co.
Sinclair & Valentine Co.
Zeese-Brandt Ink Corp.

MISCELLANEOUS

Advertising Typographers of America, Inc., The (Typography)
Russell Ernest Baum (Folding Machy.)
Ralph C. Coxhead Corp. (Composing Machines)
Ben Day, Inc. (Shading Medium)
Dexter Folder Co. (Folding Machy.)
Leiman Bros., Inc. (Vacuum Pumps)

PAPER

Chillicothe Paper Co.
Hammermill Paper Co.
Mid-States Gummed Paper Co.
Sorg Paper Co.
Strathmore Paper Co.

PHOTO DRY PLATES AND FILMS

Agfa Ansco Corp.
G. Cramer Dry Plate Co. (Photo Dry Plates)
Eastman Kodak Co.
Gevaert Co. of America, Inc.
Norman-Willets Co.
Harold M. Pitman Co.

PLATE MAKING EQUIPMENT & SUPPLIES

American Type Founders Sales Corp.
Artists Supply Co. (Opaque)
California Ink Co., Inc.
Allan B. Croke & Co.
The Douthitt Corp.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
C. P. Goerz American Optical Co. (Lenses)
International Photographic Research Laboratories (Cameras—Densitometers)
William Korn, Inc. (Litho Crayon and Litho Crayon Paper Pencil Mfrs.)
Lanston Monotype Machine Co.
National Carbon Co., Inc. (Carbons)
Norman-Willets Co.
F. G. Okie, Inc. (Opaques—Developing Inks)
C. F. Pease Co. (Arc Lamps)
Harold M. Pitman & Co.
Rutherford Machinery Co., Div. General Printing Ink Corp.
Senefelder Co., Inc.
E. T. Sullebarger Co.
Texas Offset Supply Co., Inc.

PLATE MAKING SERVICES

Baker Reproduction Co.
Photo-Litho Plate Service Co.
Swart-Reichel, Inc.

PRESSROOM EQUIPMENT & SUPPLIES

American Type Founders Sales Corp. (Presses—Offset Spray Gun, etc.)
Bingham Brothers Co. (Rollers, etc.)
Sam'l Bingham Son Mfg. Co. (Rollers)
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Godfrey Roller Co. (Dampening Rollers).
Harris-Seybold-Potter Co. (Presses)
Ideal Roller & Mfg. Co. (Rollers)
International Press Cleaners & Mfg. Co. (Press Cleaner)
International Printing Ink Corp.
Johnston Paper Co. (Make Ready Tissue)
Harold M. Pitman Co.
Rapid Roller Co. (Rollers and Blankets)
The Rathbun & Bird Co., Inc. (Machinists)
Roberts & Porter, Inc.
Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair & Valentine Co. (Blankets)
E. T. Sullebarger Co.
Vulcan Proofing Co. (Rollers and Blankets)

CLASSIFIED

All classified advertisements will be charged for at the rate of ten cents per word. $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of Modern Lithography, 254 W. 31st St., New York.

•

Wanted:

Will pay cash for a good 17 x 22 or slightly larger Harris Offset. Describe thoroughly. Craftsmen Finance Co., 908 Standard Bldg., Cleveland, Ohio.

•

For Sale:

30 x 36 R. Hoe Offset Proofing Press. Good condition. Forbes Litho. Mfg. Co., Box 513, Boston, Mass.

•

For Sale:

One 11″ x 14″ 60 line halftone screen.

One 11″ x 14″ 85 line halftone screen. Thirty dollars ($30.) each. Both used about a month. Address Box No. 531.

•

Position Wanted:

Webendorfer pressman, experienced on 17 x 22-22 x 29 presses. Will go anywhere in New England. Address Box No. 532.

•

Position Wanted:

Expert platemaker, stripper and troubleshooter wants position with growing and progressive concern using latest methods; fully acquainted with all graphic arts processes; capable of taking complete charge of small offset plant; will go anywhere; may I hear from you? Address Box 533.

•

Help Wanted

Wanted a young man fully experienced in photo-lithography—dot-etching, color separating, camera operating—capable of taking complete control of the photo-lithographing department of a large offset organization in Sidney, Australia. The wages to be in line with the wages paid in America to a man of similar capabilities. The equipment to operate is that of the Lanston Monotype Machine Co. Applicants must be prepared to take permanent position. Full particulars regarding position can be obtained by writing to Box 534.

•

General Information Concerning Inventions and Patents

A reference book for inventors and manufacturers, also containing sections on the registration of trade-marks and copyrights, and a "Schedule of Government and Attorneys' Fees—sent free on request. Simply ask for "booklet" and "fee schedule." Lancaster, Allwine & Rommel, Registered Patent and Trade-Mark Attorneys, 402 Bowen Building, Washington, D. C.

•

Trained Help:

Do your plans include enlarging your Offset Department? . . . The Chicago School of Printing & Lithography can supply you with well-trained cameramen, plate makers, and offset pressmen. Or, you can send men from your other departments for special, intensive training in Offset Lithography. We offer both day and evening courses which run for twelve week terms. New term begins December 4. Why not write or phone Harold E. Sanger, Director, Chicago School of Printing & Lithography, Six-Ten Federal Street, Chicago, for assistance in your offset employment problems?

•

My Time is Your Time

—and there's no time like the present for both of us. That is, if you are looking for a young, capable, intelligent and serious layout artist who can create new ideas for you that sell; graduate of Pratt Institute, age 23, with a background of experience in the photo-engraving business. I have designed labels, laid out booklets, folders, direct advertising that has created more business. I can do the same for you. Unmarried, salary secondary, want permanent position. Familiar with all graphic arts technique. I shall be glad for the opportunity of an interview if you address Box 535.

•

Position Wanted:

Young man thoroughly acquainted with offset camera work, including line and halftone, wants a job with growing offset concern. Will go anywhere. Is also a platemaker; have done layouts, opaqueing, etc. University graduate, M. E. Degree. Box 536.

•

Opens Chicago Office

Kindred, MacLean & Co., lithographers, Long Island City, N. Y., have opened a Chicago office at 154 E. Erie Street. In charge are G. H. Jenssen, formerly Western manager for Rusling Wood, Inc., and A. M. Elliott, formerly with H. J. Heinz Company.

•

Distributes *Stylist*

Watervliet Paper Co., Watervliet, Mich., is distributing copies of *The Stylist*, a magazine for the home maker, lithographed by Michigan Lithographing Co., Grand Rapids, Mich., as an example of offset printing produced on its Spiral-Laid Cascade Offset.

•

"Cenco" Ink Conditioner

Central Compounding Co., Chicago, announces the "Cenco" ink conditioner, said to aid in reducing or eliminating picking, sticking, crystallization, mottling of offset inks. The product is supplied in two types, one for letterpress and one for offset.

•

Litho Club Hears Wood

W. H. Wood, director of chemical research, Harris-Seybold-Potter Co., recently addressed the Litho Club of Baltimore on "Deep Etch." His talk was followed by a question and answer period. William Garten of Owens-Illinois Can Co., is president of the club.

•

General Repro Co., New York, has installed a 22 x 30 Harris Press.

Carnegie Tech Job Study

Carnegie Institute of Technology, Department of Printing, Pittsburgh, has just issued an interesting booklet called "Jobs." The booklet contains a complete directory of names and present positions of former day students of the Department of Printing, Carnegie Institute of Technology, shows the broad geographical distribution of graduates and illustrates the tendency for the majority of the graduates to remain in the printing industry. The types of positions they hold and the success they have gained encourage the belief, according to officials of the Institute, that the Department of Printing has rendered a worthwhile educational service to students and to the printing and lithographing industry at large since its establishment in 1913. Courses in printing at Carnegie Institute of Technology include a four-year program of studies in technical, liberal arts and science subjects, which leads to the degree of Bachelor of Science in Printing; a two-year course for college graduates; and a wide variety of evening courses for men engaged in the various branches of the graphic arts. Instruction covers typography, presswork, machine composition, proof reading, layout, advertising design, plant management, estimating, cost accounting, chemistry for lithographers, production methods, photomechanical processes and economic problems in printing.

•

Plan Study Classes

Plans for the establishment of educational courses in estimating, layout and typography for St. Louis graphic arts workers are being made by the Associated Printers & Lithographers of that city. Gordon C. Hall, executive vice-president, and George B. Gannett, treasurer of the association, have made tentative arrangements to use the facilities of Washington University's Adult Center Study for the classes.

•

Holds Annual "Ladies" Night

The third annual Ladies Night of the Litho Club of Philadelphia was held at the Penn Athletic Club of that city, January 13th. The usual program of dinner, followed by a floor show and dancing was given.

ADVERTISERS' INDEX

JANUARY, 1940

For Product Classification See Page 62

(The Advertisers' Index has been carefully checked but no responsibility can be assumed for any omission.)

Tale Ends

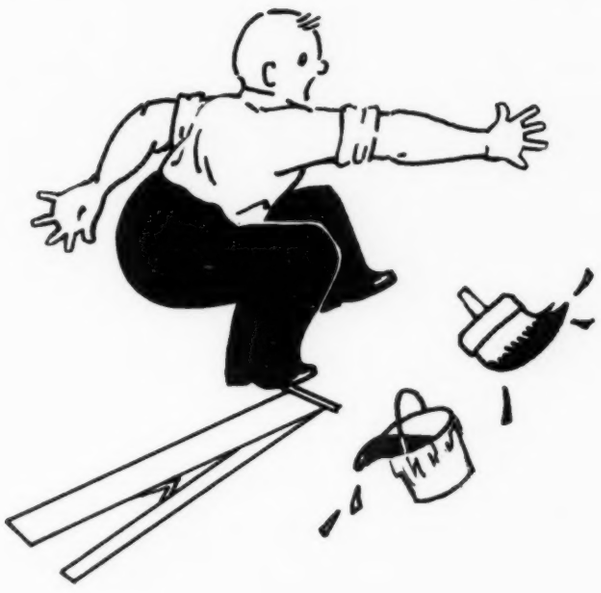
AS USUAL, among the first calendars received again this year was another in its sporting print series by Ketterlinus Lithograph Mfg. Co. The newest, a lithographed reproduction of "All Right" from the aquatint by Jed Harris after the painting by C. C. Henderson, is truly a beauty . . . Another among the early arrivals was the 3-months-at-a-glance job, in green and buff, put out by Forbes . . . Forbes, incidentally, is also responsible for the newest in the "Pioneers" series issued annually by Hercules Powder Co.

* * *

Credit Hagstrom Co. with one of the most useful calendars . . . It is a map of New York City, giving street numbers and showing the subway and elevated lines . . . A plea for return of peace and sanity in a war-torn world is made by Rolph-Clark-Stone's (of Toronto) calendar, which reproduces the famous painting "Simplicity" by Sir Joshua Reynolds . . . Another 3-months at a glance calendar is American Colortype's, in attractive combinations of blue and yellow . . . There's a pleasing nostalgia about Federal Lithograph's Kodachrome reproduction of a day in early autumn . . . The same could be said of the striking job produced by Rogers-Kellog-Stillson for W. Va. Pulp & Paper, a lithographed reproduction of a Le Grand de Reulandt oil painting of New York Harbor, 1860 . . . Panoramic views in color of New York City are the subjects of the Karl Gut Litho calendars.

* * *

Always an eye-stopper, the pretty girl motif has been used by U. O. Colson on its lithographed calendars this year with pleasing results . . . and Edwards & Deutsch have turned out a beautiful direct-color job . . . Hignell Printing, Ltd., Winnipeg, is distributing a calendar in black and white dramatically illustrated by a series of unusual photographs . . . Still they keep coming in . . . More about 1940's new crop of lithographed calendars next month.



Don't take chances!

Use AGFA REPROLITH,

the ideal film for finer results in camera and contact work. Provides maximum contrast, greatest resolving power, extra latitude in development, anti-halation coating, safety base, dependable uniformity.

Four types to choose from:

1. REGULAR

2. THIN-BASE

3. ORTHOCHROMATIC

4. ORTHOCHROMATIC THIN-BASE

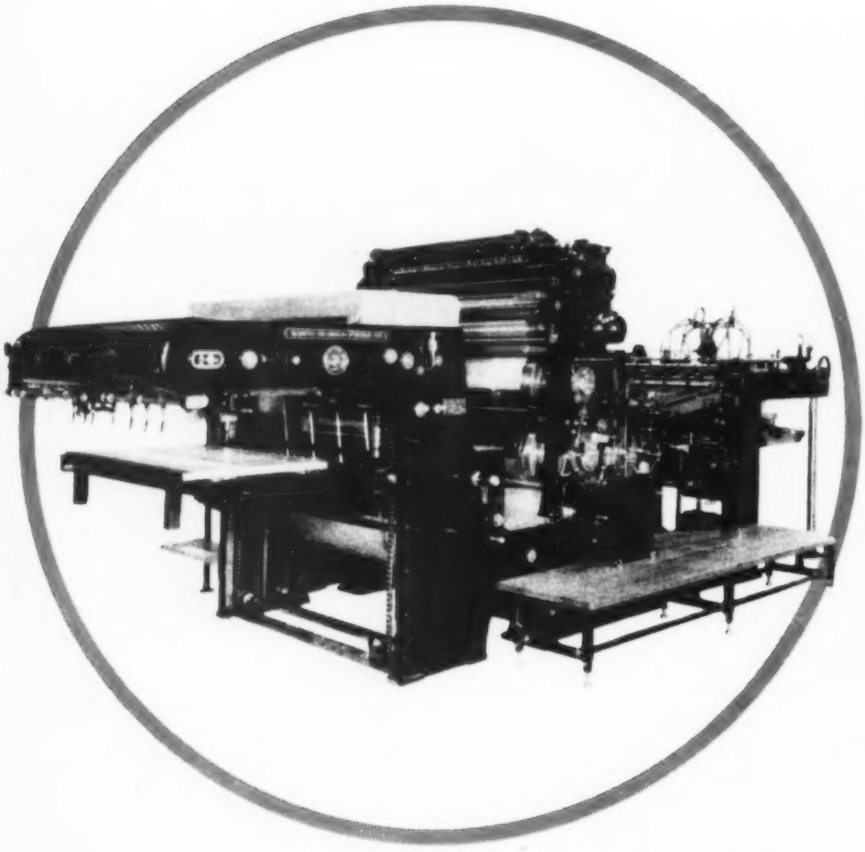
FOR BEST RESULTS USE BEST MATERIALS

AGFA ANSCO • Made in Binghamton, New York, U. S. A.

Agfa

MODERN BUSINESS WANTS OFFSET

YOU WANT MODERN BUSINESS · · · SO EQUIP WITH HARRIS



LSQ 26 x 40 SINGLE COLOR

★ Emphatically you do produce quality Offset on a Harris. Day after day you get a maximum number of impressions that sell. Then, too, you get Offset that's right the first time. Your Offset customers get what they ask for with Harris Presses. You can and do produce quality Offset. Harris Offset Presses, to completely cover the requirements of the Offset market in sizes and single and multi-color models, are designed, engineered and built by Craftsmen skilled in the Offset Process.

HARRIS · SEYBOLD · POTTER COMPANY

General Offices: 4510 E. 71st Street, Cleveland, Ohio; *Harris Sales Offices*: New York, 330 W. 42nd Street; Chicago, 343 S. Dearborn Street; Dayton, 819 Washington Street; Atlanta, (Harris-Seybold Sales Corp.) 120 Spring Street, N. W.; San Francisco, 420 Market Street; *Factories*: Cleveland, Dayton